Application for Affordable Housing Development Pursuant to Section 201H-38, Hawai'i Revised Statutes

WAILUKU APARTMENT RENTAL HOUSING PROJECT
(TMK NO. (2)3-5-001:064)

Prepared for:

Legacy Wailuku LLC

October 2018

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by Munekiyo Hiraga

MUNEKIYO HIRAGA

Planning. Project Management. Sustainable Solutions.

Application for Affordable Housing Development Pursuant to Section 201H-38, Hawai'i Revised Statutes

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LETTERS OF AUTHORIZATION 1

KEHALANI AGRICULTURE INVESTORS, LLC

September 6, 2018

Honorable Mike White, Council Chair
Honorable Robert Carroll, Chair of the Land Use Committee
Maui County Council
200 S. High Street
Wailuku, Hawaii 96793

Subject: Notarized Letter of Authorization for the Preparation, Filing, and Processing a 201H-38, HRS Application for the Proposed Affordable Workforce Rental Housing Project Located at TMK: (2) 3-5-001:064, Wailuku, Island of Maui, Hawaii

Dear Council Members White and Carroll:

We hereby provide authorization to V. Bagoyo Development Consulting Group, LLC, Schatz Collaborative LLC, and Legacy Wailuku LLC or its representative, to prepare, file, and process on our behalf an application for our proposed affordable rental housing project pursuant to 201H-38, Hawaii Revised Statutes (HRS) including an associated environmental assessment (EA). The proposed rental housing project is located on TMK: (2) 3-5-001:064, Wailuku, Hawaii.

If you have any questions or need any additional information regarding this authorization please contact Everett Dowling at 808-244-1500.

Sincerely,

Brian Heafey
Authorized Signatory

Kehalani Agricultural Investors, LLC
Its Authorized Signatory

cc: Mr. Vince Bagoyo (V. Bagoyo Development Consulting Group), Schatz Collaborative LLC, and Legacy Wailuku LLC

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of San Francisco)

On September 10, 2018 before me, Whitney Ann Allen, Notary Public,
Date *Here Insert Name and Title of the Officer*

personally appeared Brian Heafey
Name(s) of Signer(s)

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.

WHITNEY ANN ALLEN
Notary Public - California
San Francisco County
Commission # 2150586
My Comm. Expires Apr 26, 2020

Signature
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer — Title(s): _____	☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General	☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer Is Representing: _____	Signer Is Representing: _____

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LEGACY WAILUKU LLC

September 13, 2018

Honorable Mike White, Council Chair
Honorable Robert Carroll, Chair of the Land Use Committee
Maui County Council
200 South High Street
Wailuku, Hawaii 96793

SUBJECT: Notarized Letter of Authorization for the Preparation, Filing, and Processing a 201H-38, HRS Application for the Proposed Affordable Workforce Rental Housing Project Located at TMK (2)3-5-001:064, Wailuku, Island of Maui, Hawai'i

Dear Councilmembers White and Carroll:

Legacy Wailuku LLC, applicant of the subject application, hereby authorizes Munekiyo Hiraga to prepare, file, and process on our behalf an application for our proposed affordable rental housing project pursuant to 201H-38, Hawaii Revised Statutes (HRS) including an associated environmental assessment (EA). The proposed rental housing project is located on TMK (2)3-5-001:064, Wailuku, Hawai'i.

If you have any questions or need any additional information regarding this authorization, please contact me at 206.930.1859.

Sincerely,

LEGACY WAILUKU LLC, a Delaware limited liability company
By: Legacy/Pier Wailuku LLC, a Delaware limited liability company, its Managing Member
By: Legacy Partners 2717 LLC, a Delaware limited liability company, its Managing Member

By:_____
Kerry Nicholson, a Managing Member

cc: Vince Bagoyo, V Bagoyo Development Consulting Group
Michael Munekiyo, Munekiyo Hiraga

K:\DATA\Legacy\Wailuku Afford Rental\Applications\201H\Letter of Authorization Legacy Wailuku LLC.doc

STATE OF WASHINGTON)
) ss
COUNTY OF KING)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Kerry Nicholson, known to me or upon satisfactory evidence shown to be the same, who on oath stated that he was authorized to execute this instrument and acknowledged it as a Managing Member of Legacy Partners 2717 LLC, the Managing Member of Legacy/Pier Wailuku LLC, the Managing Member Legacy Wailuku LLC, a Delaware limited liability company, to be the free and voluntary act of such limited liability company for the uses and purposes mentioned in this instrument.

Given under my hand and seal of office this 13th day of September, 2018.



Notary Signature: Sarah N. Argudo
Print Name: Sarah N. Argudo
Notary Public in and for the State of Washington
Residing in Maple Valley
My Commission Expires: March 3, 2021

LAND OWNERSHIP DOCUMENTATION 2

3ND

STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED
April 18, 2016 8:01 AM
Doc No(s) A-59520046

/s/ NICKI ANN THOMPSON
REGISTRAR

1 4/19 CL
B-32792829

Conveyance Tax: $1.00

Land Court System | Regular System

After Recordation, Return by Mail Or Pickup

KEHALANI AGRICULTURAL INVESTORS, LLC
c/o PCCP, LLC
10100 Santa Monica Boulevard, Suite 1000
Los Angeles, California 90067
Attention: Portfolio Services Group

4 FAM
NCS-723675

Type of Document: (Total Pages: 12)

LIMITED WARRANTY DEED

Parties To Document:

Grantor: RCFC KEHALANI, LLC, a Delaware limited liability company

Grantee: KEHALANI AGRICULTURAL INVESTORS, LLC
a Delaware limited liability company
555 California Street, Suite 3450
San Francisco, CA 94104

Tax Map Key For Property: (2) 3-5-001-064

LIMITED WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

THIS LIMITED WARRANTY DEED is executed as of April 15, 2016, by RCFC KEHALANI LLC, a Delaware limited liability company ("**Grantor**"), whose address is 555 California Street, Suite 3450, San Francisco, CA 94104, in favor of KEHALANI AGRICULTURAL INVESTORS, LLC, a Delaware limited liability company, whose address is 555 California Street, Suite 3450, San Francisco, CA 94104 hereinafter called **"Grantee".**

WITNESSETH THAT:

The Grantor, in consideration of the sum of TEN DOLLARS ($10.00) and other good and valuable consideration, the receipt of which by the Grantor is hereby acknowledged, does hereby grant, bargain, sell and convey unto the Grantee, as TENANT IN SEVERALTY, its successors and assigns, all that certain fee simple real property located in the Island and County of Maui, State of Hawaii, more fully described in Exhibit "A" attached hereto and made a part hereof (**"Property"**), subject however, to the encumbrances mentioned in such Exhibit "A";

AND the reversions, remainders, rents, issues and profits thereof, together with all improvements, tenements, rights, easements, development rights, privileges, and appurtenances to the same belonging or appertaining or held and enjoyed therewith, and all of the estate, right, title and interest of the Grantor both at law and in equity therein and thereto:

TO HAVE AND TO HOLD the same unto the Grantee, its successors and assigns, absolutely and in fee simple, subject to the encumbrances mentioned in such Exhibit "A".

AND, in consideration of the premises, the Grantor, for itself, its successors and assigns, hereby covenants with the Grantee, its successors and assigns: that the Grantor has good right to sell and convey the Property in fee simple; that the Property is free and clear of and from all encumbrances made or suffered by the Grantor, except as set forth herein and in such Exhibit "A", and for the lien of real property taxes not yet required by law to be paid; and that the Grantor will warrant and defend the Property against any and all encumbrances made or suffered by Grantor, except as aforesaid.

Date: April ____, 2016

GRANTOR:

RCFC KEHALANI, LLC,
a Delaware limited liability company

By: _____

Name: Steve Towle
Authorized Signatory

Title: _____

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) ss
COUNTY OF Los Angeles)

On Mar 24, 2016, before me, Cindy Karina Recinos, Notary Public, personally appeared Steve Towle and ~~X~~ 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 _____.

My commission expires Jun 10, 2017

CINDY KARINA RECINOS
Commission # 2028336
Notary Public - California
Los Angeles County
My Comm. Expires Jun 10, 2017

EXHIBIT A

LEGAL DESCRIPTION

All of that certain parcel of land (being portion(s) of the land(s) described in and covered by Deed: Kamehameha IV to William P. Alexander, dated October 16, 1862, and recorded in Liber 16, Page 8 and by Royal Patent Number 4529-B and 4549, Land Commission Award Number 71 to Michael J. Nowlein) situate, lying and being at Wailuku, Island and County of Maui, State of Hawaii, being LOT J of the "WAIKAPU EAST (LARGE-LOT) SUBDIVISION NO. 3", and thus bounded and described:

Beginning at a point at the southwesterly corner of this lot, the coordinates of said point of beginning referred to Government Survey Triangulation Station "LUKE" being 4,236.79 feet south and 2,218.58 feet west and running by azimuths measured clockwise from true South:

1.	172°	39'	11"	301.42	feet along the easterly side of Honoapiilani Highway (F.A.P. No. 13-G) to a point;
2.	262°	36'		6.43	feet along same to a point;
3.	172°	36'		570.94	feet along same to a point;
4.	Thence along the southerly side of Kuikahi Drive Extension on a curve to the right, having a radius of 40.00 feet, the chord azimuth and distance being: 217° 13' 56.19 feet to a point;				
5.	261°	50'		151.68	feet along same to a point;
6.	Thence along same on a curve to the right, having a radius of 1,664.00 feet, the chord azimuth and distance being:				

			270° 25' 496.70 feet to a point;
7.	279° 00'	248.10	feet along same to a point;
8.	Thence along same on a curve to the right, having a radius of 40.00 feet, the chord azimuth and distance being: 324° 00' 56.57 feet to a point;		
9.	10° 43'	323.28	feet along the remainder of R.P. 4529-B and 4549, L.C. Aw. to Michael J. Nowlein, being also along Lot K of Waikapu East (Large-Lot) Subdivision No. 3 to a point;
10.	Thence along same on a curve to the right, with the point of curvature azimuth from the radial point being: 280° 43' and the point of tangency azimuth from the radial point being: 284° 32' 45", having a radius of 1,600.00 feet, the chord azimuth and distance being: 12° 37' 52.5" 106.91 feet to a point;		
11.	61° 16'	878.02	feet along Grant 3343 to Claus Spreckels, being also along Lot A of Waikapu East (Large-Lot) Subdivision No. 3 to the point of beginning and containing an area of 14.416 acres, more or less.

BEING THE PREMISES ACQUIRED BY LIMITED WARRANTY DEED

GRANTOR : KEHALANI HOLDINGS COMPANY, INC., a Hawaii corporation

GRANTEE : RCFC KEHALANI LLC, a Delaware limited liability company, as Tenant in Severalty

DATED : as of August 27, 2012
RECORDED : Document No. A-47700412

EXCEPTIONS

1. Real Property Taxes, if any, that may be due and owing.

   The premises described is covered by Tax Key (2) 3-5-001-064.

2. Mineral and water rights of any nature in favor of the State of Hawaii.

3. GRANT

   TO : MAUI ELECTRIC COMPANY, LIMITED and GTE HAWAIIAN TELEPHONE COMPANY INCORPORATED, now known as HAWAIIAN TELCOM, INC.

   DATED : June 7, 1982
   RECORDED : Liber 16438 Page 537
   GRANTING : a perpetual right and easement for utility purposes

4. The terms and provisions contained in the following:

   INSTRUMENT : DECLARATION OF CONDITIONS

DATED : July 25, 1990
RECORDED : Document No. 90-117006

5. The terms and provisions contained in the following:

INSTRUMENT : UNILATERAL AGREEMENT AND DECLARATION FOR CONDITIONAL ZONING

DATED : August 29, 1991
RECORDED : Document No. 91-124296

SECOND SUPPLEMENTAL UNILATERAL AGREEMENT dated --- (acknowledged May 2, 2003), recorded as Document No. 2003-091382, by HAWAII LAND & FARMING COMPANY, INC., a Delaware corporation.

SUPPLEMENTAL UNILATERAL AGREEMENT dated --- (acknowledged April 15, 2003), recorded as Document No. 2003-091383, by KEHALANI MAUKA LLC, a Hawaii limited liability company.

6. Restriction of vehicle access rights along Honoapiilani Highway (F.A.P. No. 13-G), as shown on survey map prepared by Warren S. Unemori, Land Surveyor, with Warren S. Unemori - Engineering, Inc., dated June 27, 1994, revised January 11, 1995 and February 17, 1995.

7. Existing sewerline Easement "S-1" (15 feet wide), as shown on survey map prepared by Warren S. Unemori, Land Surveyor, with Warren S. Unemori - Engineering, Inc., dated June 27, 1994, revised January 11, 1995 and February 17, 1995.

8. The terms and provisions contained in the following:

INSTRUMENT : SUBDIVISION AGREEMENT (AGRICULTURAL USE)

DATED : January 26, 1995
RECORDED : Document No. 95-019375
PARTIES : C. BREWER HOMES, INC., a Delaware

corporation, and the COUNTY OF MAUI, through its DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT

9. The terms and provisions contained in the following:

INSTRUMENT : DEFERRAL OF SUBDIVISION REQUIREMENTS AGREEMENT

DATED : February 16, 1995
RECORDED : Document No. 95-073993
PARTIES : C. BREWER HOMES, INC., a Delaware corporation, and the DEPARTMENT OF WATER SUPPLY of the County of Maui

10. GRANT

TO : COUNTY OF MAUI

DATED : March 30, 1994
RECORDED : Document No. 95-079773
GRANTING : an easement for sewerline purposes over Easement "S-1", being more particularly described therein

No Joinder by C. Brewer Homes, Inc., now known as Kehalani Holdings Company, Inc., a Hawaii corporation.

11. The terms and provisions contained in the following:

INSTRUMENT : MEMORANDUM CONCERNING GRANT OF VARIOUS PROPERTY RIGHTS

DATED : --- (acknowledged August 19, 1999 and August 18, 1999)
RECORDED : Document No. 99-189645

12. GRANT

TO : HAWAII LAND & FARMING COMPANY, INC., a

Delaware corporation

DATED : August 3, 1999
RECORDED : Document No. 99-189647
GRANTING : a perpetual Offsite Drainage Easement "D-1" in favor of Tax Key (2) 3-5-001-001 and (2) 3-4-007-002

13. The terms and provisions contained in the following:

INSTRUMENT : AGREEMENT FOR IMPLEMENTATION OF WATER MASTER PLAN FOR KEHALANI (WAILUKU PROJECT DISTRICT 3)

DATED : December 18, 2002
RECORDED : Document No. 2002-234288
PARTIES : HAWAII LAND & FARMING COMPANY, INC., a Delaware corporation, KEHALANI MAUKA, LLC, a Hawaii limited liability company, and the DEPARTMENT OF WATER SUPPLY OF THE COUNTY OF MAUI, an agency of the County of Maui, a body politic and corporate, and a political subdivision of the State of Hawaii

ABOVE AGREEMENT AMENDED BY INSTRUMENT

DATED : August 13, 2008
RECORDED : Document No. 2008-130559

14. The terms and provisions contained in the following:

INSTRUMENT : AGREEMENT FOR IMPLEMENTATION OF WATER MASTER PLAN FOR KEHALANI (WAILUKU PROJECT DISTRICT 3) (TRANSMISSION CREDITS)

DATED : December 18, 2002
RECORDED : Document No. 2002-234289

PARTIES : HAWAII LAND & FARMING COMPANY, INC., a Delaware corporation, KEHALANI MAUKA, LLC, a Hawaii limited liability company, and the DEPARTMENT OF WATER SUPPLY OF THE COUNTY OF

MAUI, an agency of the County of Maui, a body politic and corporate, and a political subdivision of the State of Hawaii

ABOVE AGREEMENT AMENDED BY INSTRUMENT

DATED : August 13, 2008
RECORDED : Document No. 2008-130560

15. The terms and provisions contained in the following:

INSTRUMENT : KEHALANI-WAILUKU PROJECT DISTRICT 3 OFFSITE SEWER IMPROVEMENTS

DATED : December 24, 2002
RECORDED : Document No. 2002-234295
PARTIES : HAWAII LAND & FARMING COMPANY, INC., a Delaware corporation, KEHALANI MAUKA, LLC, a Hawaii limited liability company, and the DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT, an agency of the County of Maui, a body politic and corporate, and a political subdivision of the State of Hawaii

16. The terms and provisions contained in the following:

INSTRUMENT : STORAGE CREDITS AND AMENDED RIGHT OF ENTRY AGREEMENT FOR 3.0 MG CONCRETE RESERVOIR AT WAILUKU, MAUI, HAWAII

DATED : December 5, 2002
RECORDED : Document No. 2002-234297
PARTIES : HAWAII LAND & FARMING COMPANY, INC., a Delaware corporation, and the BOARD OF WATER SUPPLY OF THE COUNTY OF MAUI, an agency of the County of Maui, a body politic and corporate, and a political subdivision of the State of Hawaii

17. Future Roadway, as shown on survey map prepared by Reed M. Ariyoshi, Land Surveyor, with Warren S. Unemori - Engineering, Inc., dated September 22, 2003, last revised on September 21, 2004.

18. The terms and provisions contained in the following:

INSTRUMENT	:	AGREEMENT FOR ALLOCATION OF FUTURE SUBDIVISION POTENTIAL
DATED	:	November 3, 2004
RECORDED	:	Document No. 2004-227693
PARTIES	:	WAILUKU AGRIBUSINESS COMPANY, INC., and HAWAII LAND & FARMING COMPANY, INC.

HAWAIʻI HOUSING FINANCE AND DEVELOPMENT CORPORATION FOR ACTION APPROVED BY ITS BOARD OF DIRECTORS AT THEIR MEETING ON AUGUST 15, 2018

3

Reviewed and Approved by the Executive Director
August 15, 2018

FOR ACTION

I. REQUEST:

Approve the Certification of Legacy Wailuku LLC, or Other Successor Entity Approved by the Executive Director, as an Eligible Developer Pursuant to Section 15-307-24, Hawaii Administrative Rules; the Project Proposal Including Exemptions from Statutes, Ordinances and Rules Pursuant to Section 201H-38, Hawaii Revised Statutes; and Execution of Development Documents for Approved Exemptions for the Proposed Wailuku Apartment Rental Housing Project, Located in Wailuku, Maui, TMK No.: (2) 3-5-001:064

II. FACTS

Project:	Wailuku Apartment Rental Housing Project
Location:	Wailuku, Maui, Hawaii, TMK: (2) 3-5-001:064
HHFDC Involvement:	Sponsor and 201H Application
Landownership:	Private (current owner is Kehalani Agricultural Investors, LLC)
Land Area	14.416 acres (627,961 square feet)
State Land Use District:	Agriculture
County Zoning:	Agriculture
Project Type:	Apartment rental
No. of Units:	324 units, inclusive of manager's unit
Parking Stalls:	661

Proposed Unit Distribution by AMI category and rent range:

Area Median Income Level	Number of Units	Rental Range*	Percentage of Units
51–80%	55	$627 - $1,616*	17%
81-100%	55	$1,123 - $2,107*	17%
101-120%	55	$1,453 - $2,598*	17%
121-140%	30	$1,783 - $3,089*	9%
Subtotal of Affordable Units	**195**		**60%**
Market Units	129	TBD	40%
Grand Total	**324**		**100%**

* Note: Rents are based on 2018 HHFDC Rent Guidelines minus utility allowance. These are subject to change based on annually published rent guidelines and utility allowances by State and County agencies.

Proposed Unit Type and floor areas:

Unit Type	Number of Units	Floor Area
Studio	27	424 sq. ft.
1 Bedroom/1 Bath	108	552 sq. ft.
2 Bedroom/2 Bath	135	741 to 812 sq. ft.
3 Bedroom/2 Bath	54	934 to 956 sq. ft.
Total	**324**	

Developer: Legacy Wailuku LLC
Developer Contact: Schatz Collaborative LLC
Linda Schatz, Principal
(808) 428-8717
lindaschatz@schatzcollaborative.com

A. Legacy Wailuku LLC ("Developer") is proposing to develop 324 affordable and market rate apartment rental units on a 14.416-acre parcel zoned Agriculture located in Wailuku, Maui to be called the Wailuku Apartment Rental Housing Project ("Project"). See Exhibit "A", Location Map. The Project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story garden style buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with approximately 661 parking stalls. The Project will also include a community center/leasing office building, swimming pool, barbeque area, and four (4) children play areas. Access to the property is proposed through a new access driveway along Wai'ale Road and a new access drive via a cross intersection with the Ku'ikahi Drive entry to the Kehalani Village Center. See Exhibit "B", Plans, Elevations and Outline Specifications. The Developer's rental affordability commitment is 30 years.

B. The subject property ("Property") was formerly in sugar cane production and is currently vacant. It is located adjacent to the Kehalani Master Planned Community and is directly south of the mixed-use commercial/residential Kehalani Village Center. It is bordered by Honoapiilani Highway to the west, Kuikahi Drive to the north and Waiale Road to the east. The Maui Lani Master Planned Community's mixed-use commercial/residential Maui Lani Village Center is located across the Property and Wai'ale Road. A natural drainageway crosses the Property along its southern boundary and a man-made drainageway traverses the western half of the Property that eventually empties into a retention basin in Waikapu across Wai'ale Road and Waikapu Gardens Subdivision.

C. The Project will require a State District Boundary Amendment (DBA) from the State Agricultural District to the State Urban District. Since the Property is less than 15 acres, the DBA will be processed through the Maui County Council pursuant to Section 205-3.1, Hawaii Revised Statutes (HRS). The Project site is not designated Important Agricultural Lands. The DBA request will be heard by the County Council after approval of the Project and 201H exemptions.

D. The Project will be owned and developed by a single asset limited liability company, Legacy Wailuku LLC ("Developer"), a Delaware limited liability company, whose general partner and managing member is Legacy/Pier Wailuku LLC, and whose non-managing member is Kehalani Agricultural Investors, LLC (KAI). Under the Developer's Limited Liability Company Agreement, KAI has

agreed to convey and assign the Property to the Developer as its capital contribution. The Project will be the Developer's first project to be developed in Hawaii. Legacy Partners, a member of Legacy/Pier Wailuku LLC, has owned, managed, operated and developed multifamily apartment properties consisting of approximately 1,800 units throughout the western United States. A summary Legacy Partners' development experience is presented in Exhibit "C".

E. On July 24, 2017, the Developer submitted a 201H application request to HHFDC for approval from certain exemptions from statutes, ordinances, and rules for the Project pursuant to Section 201H-38, Hawaii Revised Statutes ("HRS").

F. By letter dated August 2, 2017, the County of Maui Department of Housing and Human Concerns (DHHC) confirmed that the Developer's proposed Project will not meet the Maui County rental guidelines for processing of the 201H application and that the 201H application should be processed by HHFDC under its affordable rental guidelines.

G. The Developer presented the Project and received community input at several community meetings with the Waikapu Community Association, Kehalani Community Association, the Faith Action Community Equity Maui, during the period May – June 2017. A meeting was also held with Monique Yamashita, Executive Director, of Ka Hale A Ke Ola and Hale Makana O Waiale on April 27, 2017.

H. A Draft Environmental Assessment and Anticipated Finding of No Significant Impact for the Project combined with the 201H list of requested exemptions was published by the Office of Environmental Quality Control (OEQC) in the April 8, 2018 issue of The Environmental Notice. A Final Environmental Assessment with a Finding of No Significant Impact (FEA-FONSI) for the Project was published by OEQC on July 23, 2018.

III. DISCUSSION

A. Under Section 201H-38 HRS, Housing development; exemption from statutes, ordinances, charter provisions, and rules, the HHFDC may develop on behalf of the State or with an eligible developer, or may assist under a government assistance program in the development of, housing projects that shall be exempt from all statutes, ordinances, charter provisions, and rules of any government agency relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon; provided that:

1. The corporation finds the housing project is consistent with the purpose and intent of this chapter, and meets minimum requirements of health and safety;

2. The development of the proposed housing project does not contravene any safety standards, tariffs, or rates and fees approved by the public utilities commission for public utilities or of the various boards of water supply authorized under chapter 54;

3. The legislative body of the county in which the housing project is to be situated shall have approved the project with or without modifications:

   a. The legislative body shall approve, approve with modification, or disapprove the project by resolution within forty-five days after the

corporation has submitted the preliminary plans and specifications for the project to the legislative body. If on the forty-sixth day a project is not disapproved, it shall be deemed approved by the legislative body;

b. No action shall be prosecuted or maintained against any county, its officials, or employees on account of actions taken by them in reviewing, approving, modifying, or disapproving the plans and specifications; and

c. The final plans and specifications for the project shall be deemed approved by the legislative body if the final plans and specifications do not substantially deviate from the preliminary plans and specifications. The final plans and specifications for the project shall constitute the zoning, building, construction, and subdivision standards for that project.

4. The land use commission shall approve, approve with modification, or disapprove a boundary change within forty-five days after the corporation has submitted a petition to the commission as provided in section 205-4, HRS. If, on the forty-sixth day, the petition is not disapproved, it shall be deemed approved by the commission.

B. Application information on the requested exemptions was included in the Draft EA and distributed to the agencies, organizations and individuals listed on the attached Exhibit "D". Written comments received during the 30-day comment period and responses to the comments were included in the Final EA. A summary of the exemptions requested, agency comments, developer responses and recommended actions are provided in the attached Exhibit "E". All requested exemptions are recommended for approval with the exception of exemption no. 7 as it affects health and safety.

Written comments were received from a total of twenty-three (23) agencies, individuals, community groups and organizations, of which five (5) agencies provided comments relating to the exemptions under their jurisdiction. In addition to the written comments received through the Draft EA process, the Developer notified the County agencies having jurisdiction over the requested exemptions and convened an "all agency" meeting on May 15, 2018 to solicit their comments (see Exhibit "F" – All Agency Meeting Notes).

C. Written agency comments relating to the requested exemptions were received from the Department of Planning (DP), Department of Public Works (DPW), Office of Hawaiian Affairs (OHA), Department of Parks and Recreation (DPR), and Police Department (see Exhibit "G" – Agency Comments and Responses).

D. One individual and two organizations providing written comments expressed the concern that the Developer is requesting "...an absurdly high number of major exemptions". Other community concerns included traffic impacts, including cumulative impacts, impacts on the intersection of Kuikahi Drive, Maui Lani Parkway and Waiale Road, and the adequacy of the Project Traffic Impact Analysis Report; the need for a full disclosure environmental impact statement due to significant adverse impacts; need for more affordable housing; the project's affordability commitment; safety of children and kupuna walking to destinations areas in the community; lowering building heights; need for concrete curbed sidewalks on Waiale Road for pedestrian safety; and scaling the Project

back to lessen the density. (See Exhibit "H" – Community Comments and Responses)

E. The Developer believes that the requested exemptions are necessary to achieve and maintain the financial feasibility of the Project. Approval of the requested exemptions would enable the Developer to help fulfill a critical need for affordable rental housing without the use of government subsidies, and deliver rental units at a location within the Urban Growth Boundary of the Maui Island Plan in proximity to Wailuku Town, existing residential developments, public facilities and support services. Finally, the Project would yield substantially more units than what would be allowed under the current Agricultural Zoning District. The Developer considers the use of the property for critically needed affordable rental housing in a location served by infrastructure systems a significant community benefit.

F. Letters of support for the Project were provided by EAH Housing, Wailuku Heights Extension Community Association, Todd Meadows, Shawn Motonaga, Scott Crockford, and Warren Shimabukuro.

G. The estimated total project budget is approximately $96.6 million and the proposed financing structure is as follows:

Source	Interim	Permanent
Sponsor Equity	$ 1,932,069	$ 1,449,052
JV Equity	36,709,317	27,531,992
Senior Loan	57,962,080	67,622,423
Total	**$ 96,603,467**	**$ 96,603,467**

The estimated project schedule is as follows:

Process	Date
Start Design/Entitlement/Foundation Permit	November 2018
Closing of Construction Financing	December 2019
Construction Start	December 2019
Projected Occupancy Permit	September 2021

H. The present legal owner of the site is Kehalani Agricultural Investors, LLC.

I. The Project's development team includes:

1. Developer: Legacy Wailuku LLC
   Legacy Partners - Kerry Nicholson, Senior Managing Director
   Pier Investments LLC – Charles Wathen

2. EA/201H Consultant: Munekiyo & Hiraga/Bagoyo Development Consulting Group
   Mike Munekiyo, Principal/Vince Bagoyo, Principal

3. Architect: Clifford Planning & Architecture, LLC
   Janine Clifford, President

4. General Contractor: Moss and Associates
   Jonathan Kam, Manager

5. Legal Counsel: Schultz & Wright, LLP
Steve Schultz, Partner

6. Management Agent: Pier Management Hawaii, LLC
Charles Wathen

J. A market study, dated May 9, 2017, prepared by Ricky Cassiday concluded: (1) that the housing market on Maui continues to show more sales and higher prices, thus putting upward pressure on the rental market; (2) the housing stock on Maui continues to grow more slowly than the population, making housing more scarce and putting more pressure on the rental market; and (3) as market conditions continue to improve, the proposed project can expect to see heightened demand, due to its central Maui location.

K. Upon approval by the HHFDC Board of Directors, the HHFDC will enter into an agreement with the Eligible Developer pursuant to section 15-307-29, HAR. The agreement is subject to modification, and will include the following applicable terms, conditions, and covenants:

1. Purpose of the agreement, which shall include the development of lower cost rental housing;

2. At least 60% of the total units (195 units) shall be affordable to families at 140% and below the U.S. Department of Housing and Urban Development Area Median Income (AMI), of which at least 17% of the total units (55 units) shall be 80% and below AMI, 17% of the total units (55 units) shall be between 81% and 100% AMI, 17% of the total units (55 units) shall be between 101% and 120% AMI, and 30% of the total units (30 units) shall be between 121% and 140% AMI;

3. A description of the role and responsibility of the HHFDC, the eligible developer or contractor, and other parties to the agreement;

4. Project concept and cost;

5. Time required to complete the Project;

6. Delivery of dwelling units;

7. Rental program requirements pertaining to the rental of the affordable units to applicants who meet HHFDC's eligibility and qualification requirements;

8. Construction agreements (when one of the parties is a contractor);

9. Insurance and bonding or surety requirements;

10. Construction management requirements and procedures (including permit register, document and drawing register, monthly progress reports, and change order management);

11. Inspection requirements and procedures (including inspection approvals and sign-offs);

12. Manner in which progress payments are made, if any; and

13. Such standard clauses that the HHFDC determines to be required, including, but not limited to, the following:

    a. Indemnity;
    b. Severability;
    c. Termination; and
    d. Assignability.

14. The Developer has indicated they will be submitting for GET exemption on the construction costs. Savings from the GET along with the exemptions under 201H will allow the Developer to provide the 195 units at 140% AMI and below.

L. HHFDC finds the following:

1. That the Developer is an Eligible Developer pursuant to Section 15-307-24, Hawaii Administrative Rules (HAR);

2. That the Developer has solicited community input on the Project proposal in accordance with Section 15-307-25, HAR;

3. That the Developer's proposal and application for exemptions meet minimum proposal requirements pursuant to Section 15-307-26, HAR;

4. That the Project primarily includes housing units affordable to households with incomes at 140% and below the area median income, as determined by HUD;

5. That the Project and proposed exemptions as recommended for approval in Exhibit "E" are consistent with the purpose and intent of Chapter 201H, HRS, and meets minimum requirements of health and safety; and

6. That the exemptions recommended for approval do not contravene any safety standards, tariffs, or rates and fees approved by the public utilities commission for public utilities or the various boards of water supply authorized under Chapter 54, HRS.

IV. RECOMMENDATION

That the HHFDC Board of Directors approve the following for the Wailuku Apartment Rental Housing Project, in Wailuku, Maui, Hawaii, TMK: (2) 3-5-001:064, substantially as discussed in this For Action:

A. Certification of Legacy Wailuku LLC, or other successor entity approved by the Executive Director, as an Eligible Developer pursuant to Section 15-307-24, HAR;

B. Development of the Wailuku Apartment Rental Housing Project with the proposed exemptions from statutes, ordinances and rules of the County of Maui as recommended for approval, pursuant to Section 201H-38, HRS;

C. Execution of a development agreement required for such exemptions as approved by the Executive Director; and

D. Authorize the Executive Director to take all actions necessary to effectuate the purpose of this For Action;

Subject to the following:

E. Approval with or without modification by the Maui County Council pursuant to Section 201H-38, HRS;

F. Approval by the Maui County Council of a District Boundary Amendment (DBA) to the State Land Use District Map to change the existing Agricultural District designation of the Property to the Urban District prior to execution of a development agreement; and

G. Compliance with all rules and regulations and such other terms and conditions as may be required by the Executive Director.

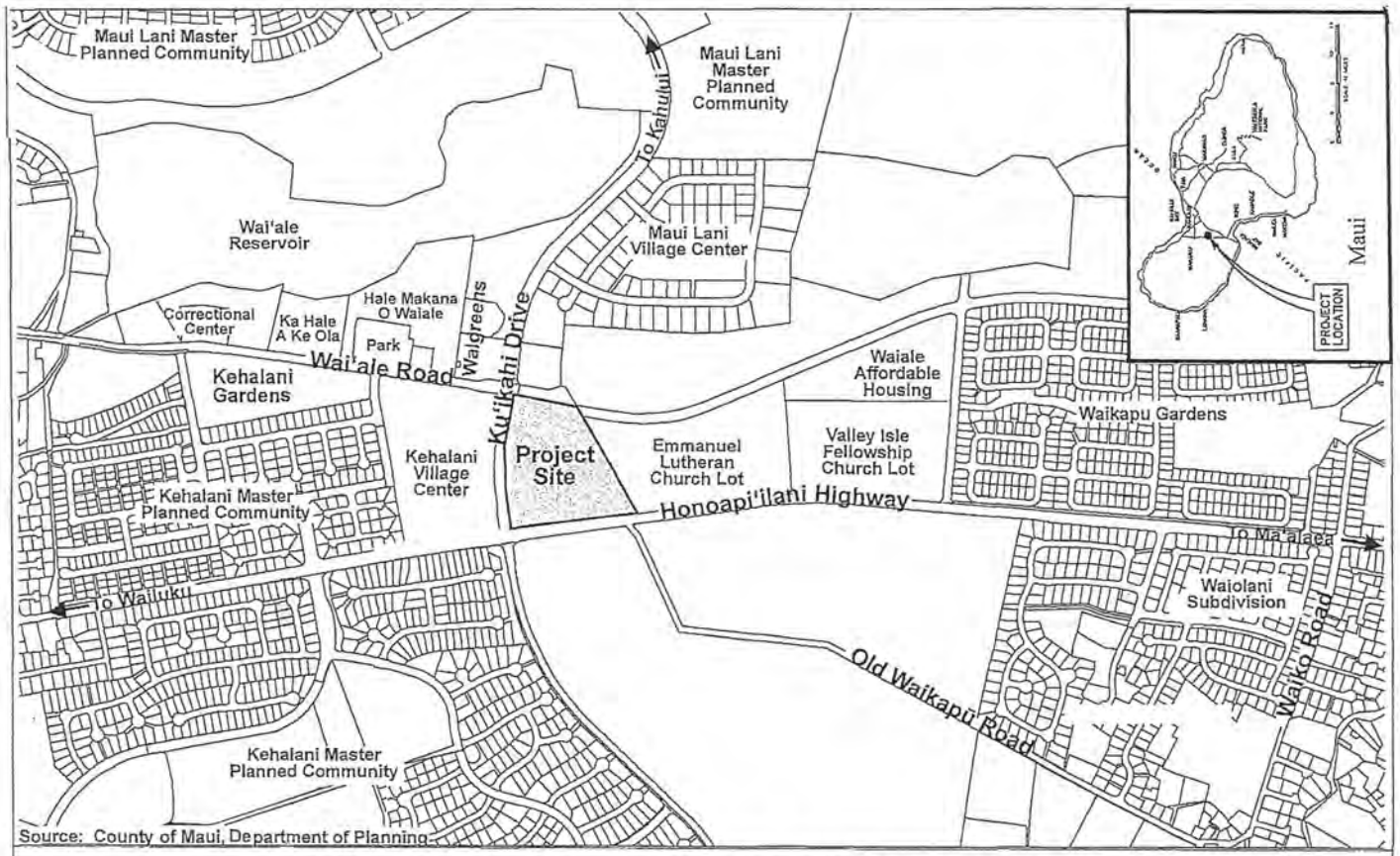
Attachments:
Exhibit "A" – Location Map
Exhibit "B" – Plans, Elevations and Outline Specifications
Exhibit "C" – Developer's Development Experience
Exhibit "D" – Distribution List of Agencies, Organizations and Individuals
Exhibit "E" – Summary of Exemptions and Recommended Actions
Exhibit "F" – All Agency Meeting Notes
Exhibit "G" – Agency Comments and Responses
Exhibit "H" – Community Comments and Responses

Prepared by: Ken Takahashi, Project Manager K.T.

Reviewed by: Richard Prahler, Development Branch Chief RMP

Approved by The Board of Directors at its meeting
on AUG 15 2018
DEVELOPMENT BRANCH
Please take necessary action.

EXECUTIVE DIRECTOR



Wailuku Apartment Rental Housing Project
Location Map

EXHIBIT A

EXHIBIT B



RUSSEL Y. GUSHI
ASLA
LANDSCAPE ARCHITECT
P.O. BOX 2291
WAILUKU, MAUI, HAWAII 96793
TELEPHONE NO. (808) 242-4333
e-mail: gushi@hawaii.rr.com

WAILUKU WORKFORCE APARTMENTS
TMK: (2) 3-5-001:004
EAST KUIKAHI DRIVE & WAIALE ROAD
WAILUKU, MAUI, HAWAII

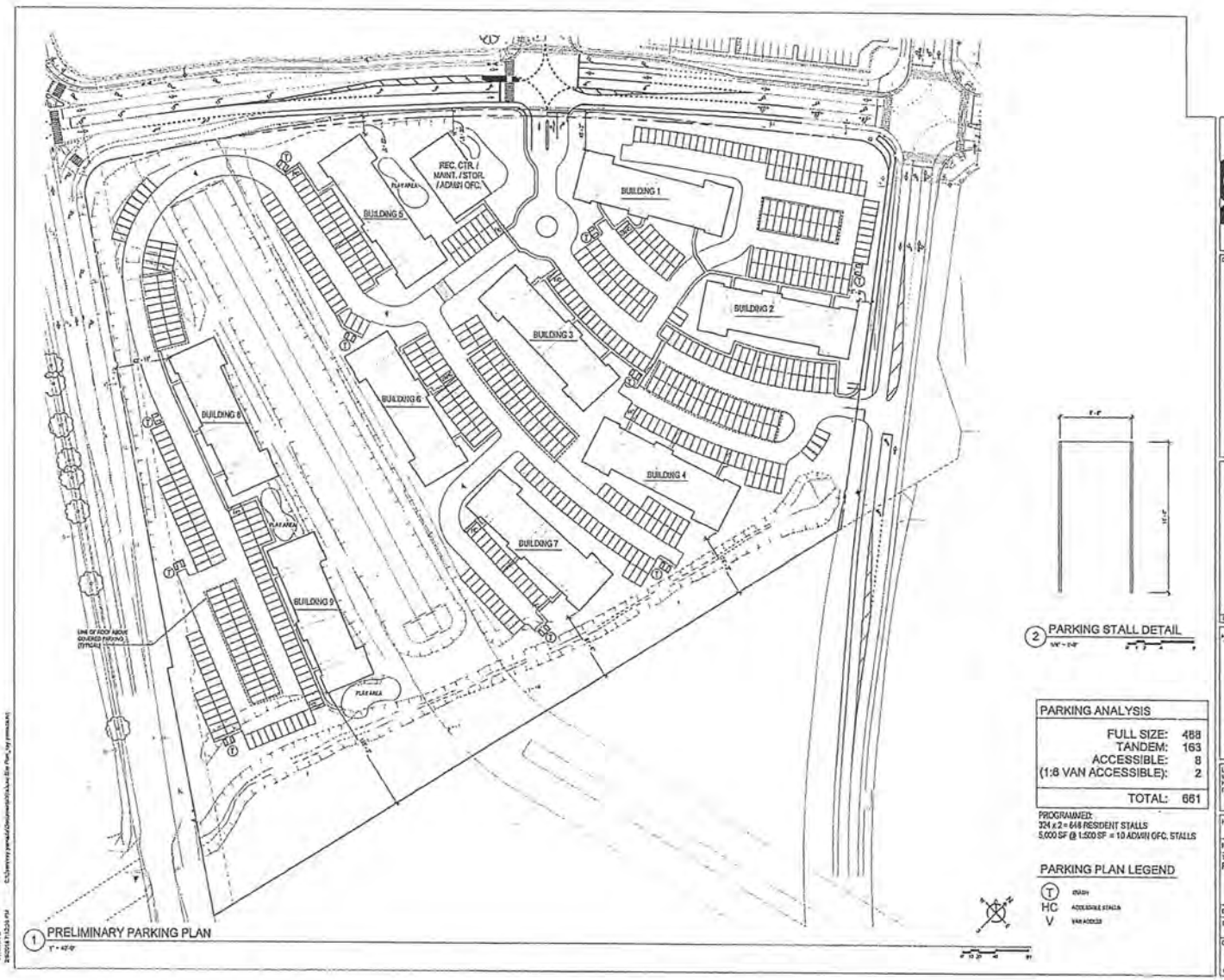
PRELIMINARY LANDSCAPE PLAN

NO	DATE	REVISION

TITLE: PRELIMINARY LANDSCAPE PLAN

PROJECT NO. 13-06
DATE: JULY, 2017
DRAWING NO.
LP-1
SHEET OF

EXHIBIT B



1 PRELIMINARY PARKING PLAN
1" = 40'-0"

2 PARKING STALL DETAIL
1/4" = 1'-0"

PARKING ANALYSIS	
FULL SIZE:	488
TANDEM:	163
ACCESSIBLE:	8
(1:6 VAN ACCESSIBLE):	2
TOTAL:	661

PROGRAMMED:
324 x 2 = 648 RESIDENT STALLS
3,000 SF @ 1,500 SF = 10 ADMIN OFC. STALLS

PARKING PLAN LEGEND

T — TANDEM
HC — ACCESSIBLE STALLS
V — VAN ACCESS

CMTland Planning and Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 2620
HONOLULU, HAWAII 96813
PHONE: 808.537.1203 FAX: 808.537.2271

CONSULTANTS:

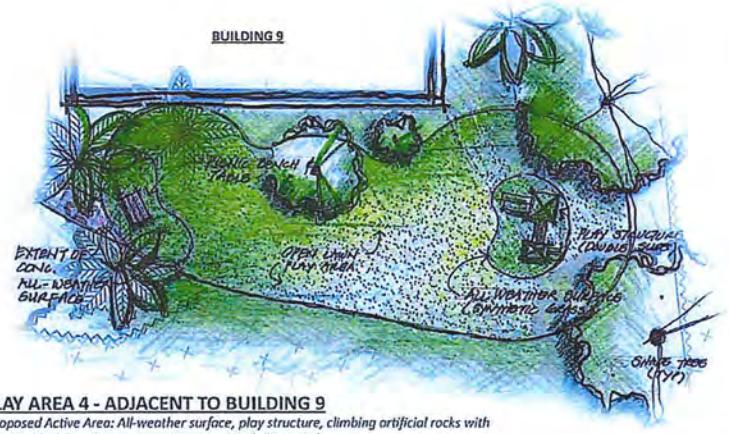
NO	DATE	DESCRIPTION	BY

All plans, ideas, designs, arrangements and plans indicated or represented by this drawing are owned by and the property of CMTland Planning and Architecture and were created, evolved and developed for use on and in connection with the specified project. None of such plans, ideas, designs, arrangements or drawings may be used by any person, firm or corporation for any purpose whatsoever on any other project without the written agreement of CMTland Planning and Architecture.

LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(TMK: 3-3-003: 054)

PROJECT NAME: WAILUKU VILLAGE COURT APARTMENTS
PROJECT NUMBER: 416.001
TITLE: PRELIMINARY PARKING PLAN
DATE: 12/02/14 (R1)
SCALE: As Indicated | DRAWN BY: RY | CHECKED BY: SL
DRAWING NO: A100
SHEET ___ OF ___

EXHIBIT B



PLAY AREA 4 - ADJACENT TO BUILDING 9

(Proposed Active Area: All-weather surface, play structure, climbing artificial rocks with picnic table & bench in proposed open grassed play area.)



PLAY AREA 3 - BETWEEN BUILDINGS 8 & 9

(Proposed Passive Area: All-weather surface, picnic tables & bench in proposed open smaller grassed play area. Additional tandem parking provided.)



PLAY AREA 1&2 - ADJACENT TO COMMUNITY CENTER & POOL

(Proposed Active Area: PA 1: All-weather surface, play structure, climbing artificial rocks and benches in proposed open grassed play area. PA 2: All-weather surface, climbing rocks & cargo nets w/ 3ea putting holes.)



OPEN LAWN PLAY AREA CONCEPTS

CliffordPlanning Architecture

EXHIBIT B

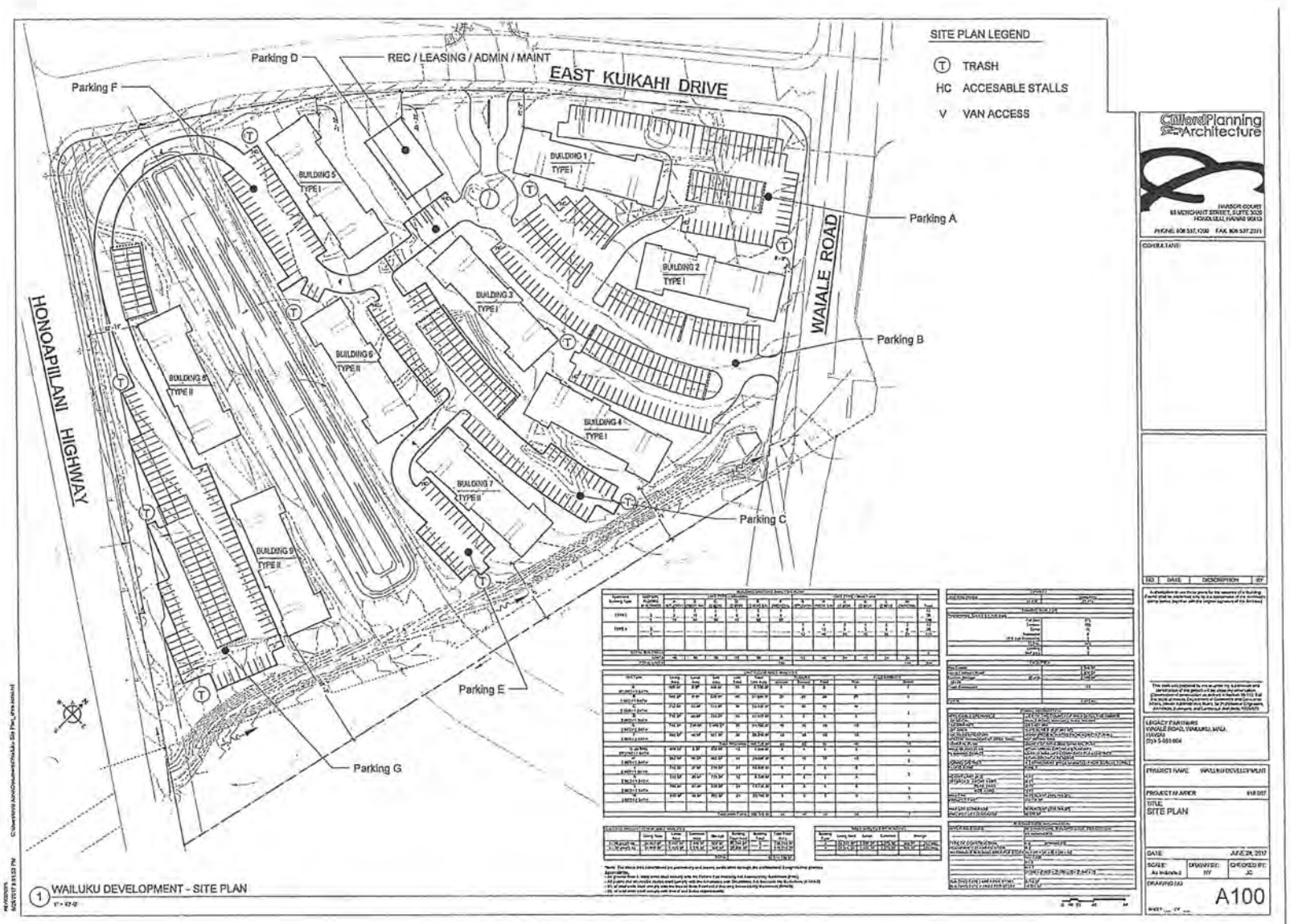
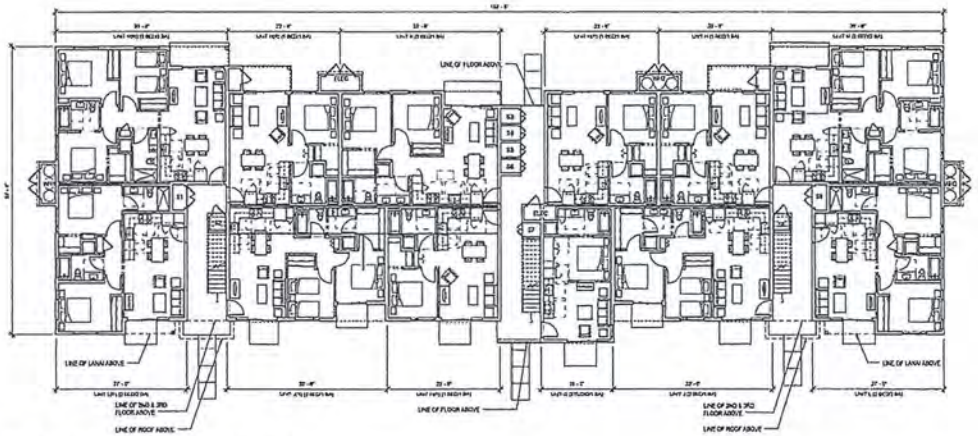
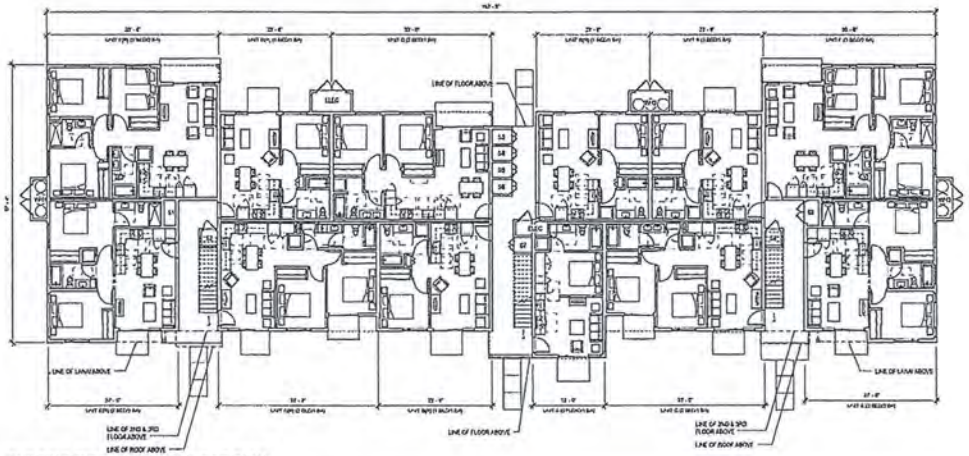

SITE PLAN LEGEND
T TRASH
HC ACCESABLE STALLS
V VAN ACCESS
EAST KUIKAHI DRIVE
WAIALE ROAD
HONOAPIILANI HIGHWAY
REC / LEASING / ADMIN / MAINT
Parking A
Parking B
Parking C
Parking D
Parking E
Parking F
Parking G
BUILDING 1 TYPE I
BUILDING 2 TYPE I
BUILDING 3 TYPE I
BUILDING 4 TYPE I
BUILDING 5 TYPE I
BUILDING 6 TYPE II
BUILDING 7 TYPE II
BUILDING 8 TYPE II
BUILDING 9 TYPE II
1 WAILUKU DEVELOPMENT - SITE PLAN
Clifford Planning Architecture
LEGACY PARTNERS
SITE PLAN
A100

EXHIBIT B



2 BUILDING TYPE II OVERALL FLOOR PLAN
1/8" = 1'-0"



1 BUILDING TYPE I OVERALL FLOOR PLAN
1/8" = 1'-0"

NORTH
WEST
EAST
SOUTH

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HARBOR COURT
55 MERCHANT STREET, SUITE 2020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT

NO.	DATE	DESCRIPTION	BY

LEGACY PARTNERS
WAIALAE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416-001

TITLE
OVERALL BUILDING PLANS

DATE:	JUNE 26, 2017	
SCALE: 1/8" = 1'-0"	DRAWN BY: KK/SE	CHECKED BY: JC

DRAWING NO.
A101

SHEET __ OF __

EXHIBIT B



4 NORTH ELEVATION
1/8" = 1'-0"



3 EAST ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"

Clifford Planning & Architecture

HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2273

CONSULTANT

NO	DATE	DESCRIPTION	INT

LEGACY PATTERNS
WAIALE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 410-057

TITLE:
BUILDING TYPE I ELEVATIONS

DATE: JUNE 28, 2017

SCALE:	DRAWN BY:	CHECKED BY:
1/8" = 1'-0"	KK/RW	JC

DRAWING NO.
A102

SHEET ___ OF ___

EXHIBIT B



4 NORTH ELEVATION
1/8" = 1'-0"



3 EAST ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"

0' 2' 4' 8'

C Ward Planning Architecture

HARBOR COURT
55 MERCHANT STREET, SUITE 2035
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2771

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

Submission for review and permit for the issuance of a Building Permit shall be deemed and held to be acceptance by the Owner of the terms hereof, together with the full obligations of the Architect.

This work was prepared by me or under my supervision and is the property of the author and may not be used in whole or part for any other project without the written consent of the author. It is unlawful for any person to alter this item in any way unless acting under the direction of a licensed professional. In accordance with Section 16-115-9 of the Hawaii Administrative Rules, this document is released for preliminary purposes only and may not be used for regulatory approvals, permits, or construction. (16-115-9)
Architects, Surveyors, and Landscape Architects 10/2015

LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
BUILDING TYPE II ELEVATIONS

DATE: JUNE 26, 2017

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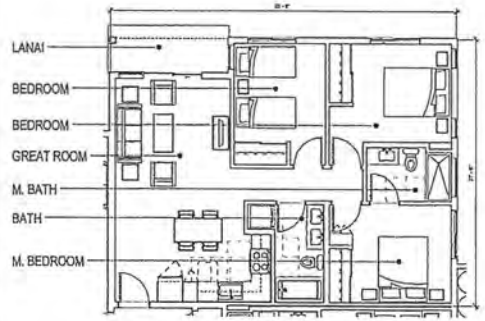
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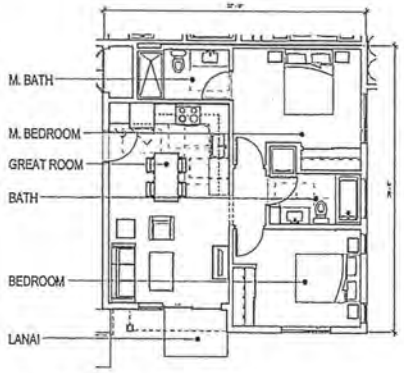
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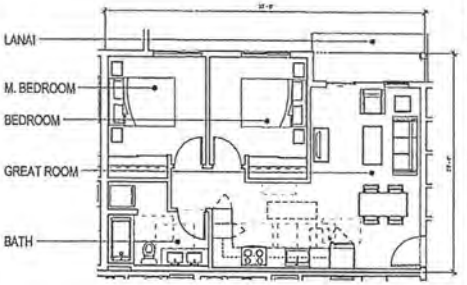
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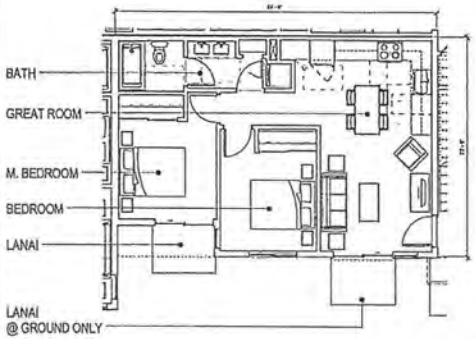
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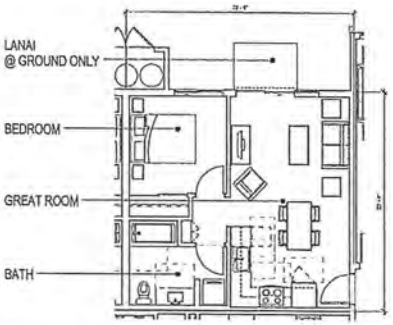
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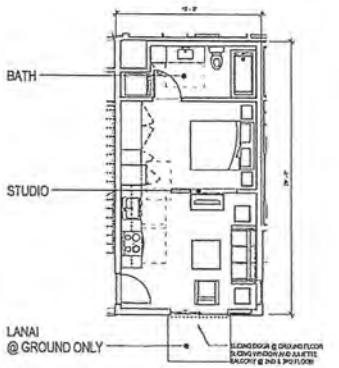
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3 UNIT C (2BD/1BA)
1/4" = 1'-0"



2 UNIT B (1BD/1BA)
1/4" = 1'-0"



1 UNIT A (STUDIO)
1/4" = 1'-0"

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HANSON COURT
55 MERCHANT STREET, SUITE 2020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2211

CONSULTANT

NO	DATE	DESCRIPTION	BY

LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 410.007

TITLE:
BUILDING TYPE I ENLARGED UNIT PLANS

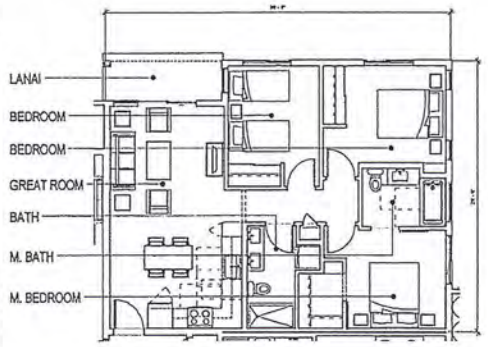
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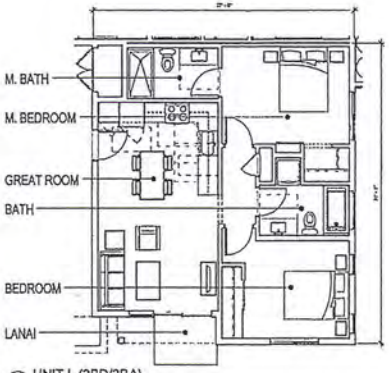
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EXHIBIT B

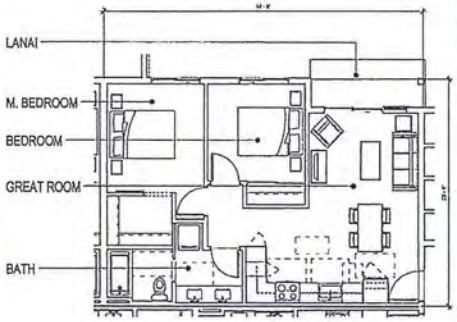
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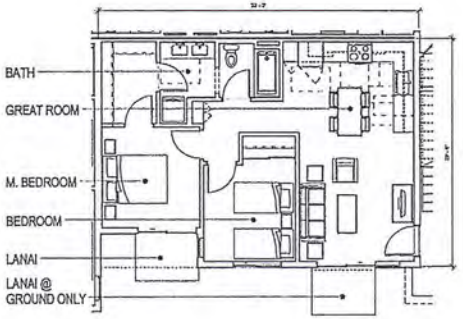
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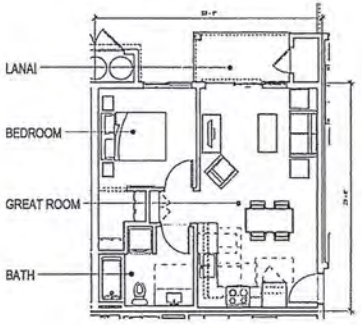
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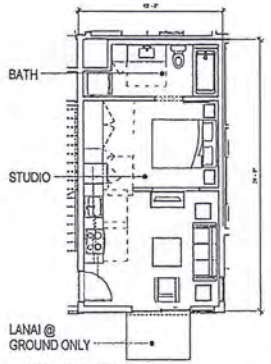
4 UNIT K (2BD/1BA)



3 UNIT J (2BD/1BA)



2 UNIT H (1BD/1BA)



1 UNIT G (STUDIO)

Chlarel Planning Architecture

HARBOR COURT
55 MERCHANT STREET, SUITE 2030
HONOLULU, HAWAII 96813
PHONE: 808.537.1250 FAX: 808.537.2271

CONSULTANT:

NO	DATE	DESCRIPTION	BY

LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(TMK: 3-5-001:004)

PROJECT NAME: WAILUKU APARTMENTS II

PROJECT NUMBER: 419.007

TITLE:
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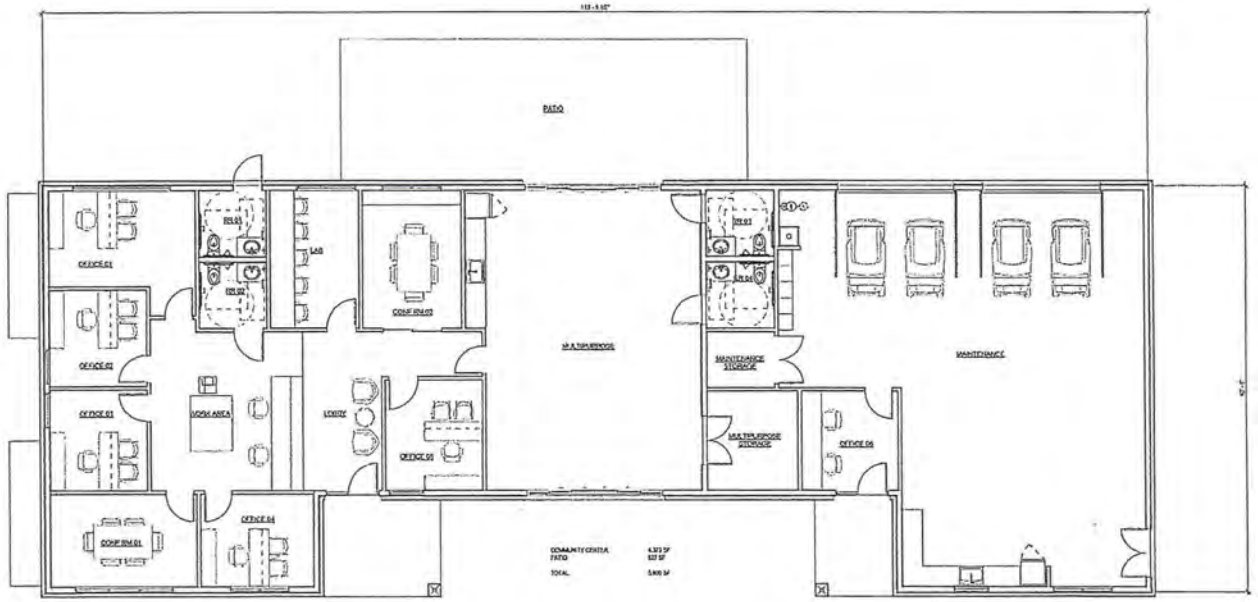
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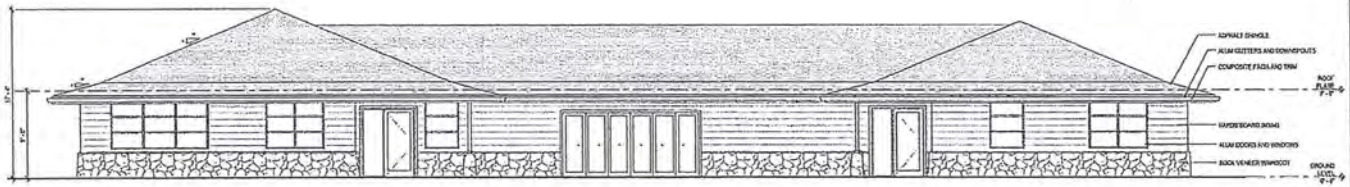
DRAWING NO.
A105

SHEET ___ OF ___

EXHIBIT B



1 COMMUNITY CENTER FLOOR PLAN



2 COMMUNITY CENTER FRONT ELEVATION

Clifford Planning and Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANTS:

NO.	DATE	DESCRIPTION	BY

LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-031:064

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 415.007

TITLE:
COMMUNITY CETNER
OVERALL FLOOR PLAN AND ELEVATION

DATE: MARCH 09, 2018

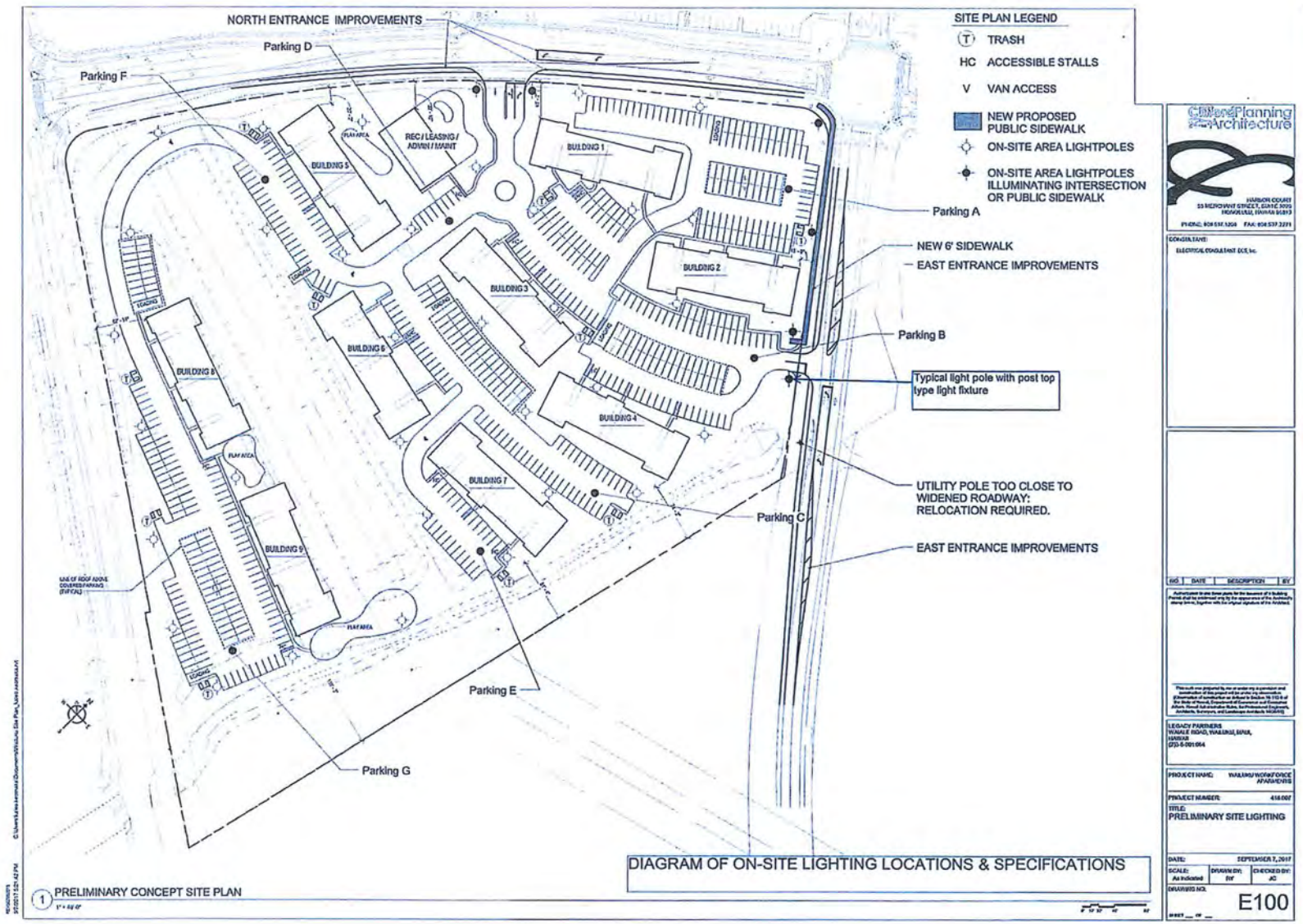
SCALE:	DRAWN BY:	CHECKED BY:
1/4" = 1'-0"	RK	JC

DRAWING NO.
A106

SHEET ___ OF ___

REVISIONS
3/7/2018 4:54 PM C:\Users\rkeiko\Documents\Wailuku Community Center_RKEIKO_kaeko.rvt

EXHIBIT B


NORTH ENTRANCE IMPROVEMENTS
Parking D
Parking F
REC / LEASING / ADMIN / MAINT
BUILDING 1
BUILDING 2
BUILDING 3
BUILDING 4
BUILDING 5
BUILDING 6
BUILDING 7
BUILDING 8
BUILDING 9
PLAY AREA
Parking A
NEW 6' SIDEWALK
EAST ENTRANCE IMPROVEMENTS
Parking B
Typical light pole with post top type light fixture
UTILITY POLE TOO CLOSE TO WIDENED ROADWAY: RELOCATION REQUIRED.
Parking C
EAST ENTRANCE IMPROVEMENTS
Parking E
Parking G
SITE PLAN LEGEND
T TRASH
HC ACCESSIBLE STALLS
V VAN ACCESS
NEW PROPOSED PUBLIC SIDEWALK
ON-SITE AREA LIGHTPOLES
ON-SITE AREA LIGHTPOLES ILLUMINATING INTERSECTION OR PUBLIC SIDEWALK
DIAGRAM OF ON-SITE LIGHTING LOCATIONS & SPECIFICATIONS
1 PRELIMINARY CONCEPT SITE PLAN
PROJECT NAME: WAIALAU WORKFORCE APARTMENTS
PROJECT NUMBER: 416.002
TITLE: PRELIMINARY SITE LIGHTING
DATE: SEPTEMBER 7, 2017
SCALE: As Indicated
DRAWN BY: DF
CHECKED BY: JC
DRAWING NO. E100

Wailuku Workforce Apartments

Preliminary Outline Specifications

Wailuku, Maui

July 2017

EXHIBIT B

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

To Be Determined

DIVISION 01 - GENERAL REQUIREMENTS

To Be Determined

DIVISION 03 - CONCRETE

030130 Maintenance of Cast-In-Place Concrete

033000 Cast-In-Place Concrete

033053 Miscellaneous Cast-In-Place Concrete

033300Architectural Concrete

034500 Precast Architectural Concrete

Refer to Appendix A – S-01

035413 Gypsum Cement Underlayment

DIVISION 04 - MASONRY

042200 Concrete Unit Masonry

DIVISION 05 - METALS

051200 Structural Steel Framing

054000 Cold-Formed Metal Framing

054400 Cold-Formed Metal Trusses

055000 Metal Fabrications

055213 Pipe and Tube Railings

055313 Bar Gratings

055819 Heating/Cooling Unit Covers

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

061000 Rough Carpentry

061053 Miscellaneous Rough Carpentry

061063 Exterior Rough Carpentry

061600 Sheathing

EXHIBIT B

061753 Shop-Fabricated Wood Trusses

062013 Exterior Finish Carpentry

062023 Interior Finish Carpentry

064013 Exterior Architectural Woodwork

064023 Interior Architectural Woodwork

064113 Wood-Veneer-Faced Architectural Cabinets

Refer to Appendix A – CAB-01

064216 Flush Wood Paneling

064300 Wood Stairs and Railings

064600 Wood Trim

Refer to Appendix A – TM-01, TM-02, TM-03

064800 Wood Frames

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

071113 Bituminous Dampproofing

071326 Self-Adhering Sheet Waterproofing

071800 Traffic Coatings

071900 Water Repellents

072100 Thermal Insulation

072500 Weather Barriers

072600 Vapor Retarders

073113 Asphalt Shingles

Refer To Appendix A – R-01a, R-01b

074646 Fiber-Cement Siding

075113 Built-Up Asphalt Roofing

076200 Sheet Metal Flashing and Trim

077100 Roof Specialties

077200 Roof Accessories

EXHIBIT B

Refer to Appendix A – R-02, R-03

078100 Applied Fireproofing

078123 Intumescent Fireproofing

078200 Board Fireproofing

078413 Penetration Firestopping

078443 Joint Firestopping

079100 Preformed Joint Seals

079200 Joint Sealants

079219 Acoustical Joint Sealants

DIVISION 08 - OPENINGS

081113 Hollow Metal Doors and Frames

Refer to Appendix A – DR-03, DR-04, DR-05

081416 Flush Wood Doors

Refer to Appendix A – DR-08, DR-09

081433 Stile and Rail Wood Doors

Refer to Appendix A – DR-01, DR-06, DR-07

083213 Sliding Aluminum-Framed Glass Doors

085313 Vinyl Windows

Refer to Appendix A – W-01

087100 Door Hardware

088000 Glazing

088300 Mirrors

089516 Wall Vents

DIVISION 09 - FINISHES

090190.52 Maintenance Repainting

092216 Non-Structural Metal Framing

092613 Gypsum Veneer Plastering

092900 Gypsum Board

- 5/8" Type-R Glass Mat Faced Gypsum Wallboard
- 5/8" Type-X Glass Mat Faced Gypsum Wallboard
- 5/8" Type-R Gypsum Wallboard
- 5/8" Type-X Gypsum Wallboard
- 5/8" Glass Mat Water-Resistant Gypsum Backing Panel

096513 Resilient Base and Accessories

096516 Resilient Sheet Flooring

Refer to Appendix A – FL-01

096816 Sheet Carpeting

099113 Exterior Painting

Refer to Appendix A – PT-01, PT-02, PT-03

099113 Interior Painting

Refer to Appendix A – PT-10, PT-11, PT-12, PT-13

099646 Intumescent Painting

099653 Elastomeric Coatings

Refer to Appendix A – EL-01

DIVISION 10 - SPECIALTIES

101300 Directories

101416 Plaques

101419 Dimensional Letter Signage

101423 Panel Signage

101423.16 Room-Identification Panel Signage

101426 Post and Panel/Pylon Signage

101473 Painted Signage

101700 Telephone Specialties

102600 Wall and Door Protection

102800 Toilet, Bath, and Laundry Accessories

Refer to Appendix A – Bath Accessories

102819 Tub and Shower Enclosures

Refer to Appendix A – SH-02, SH-04

104413Fire Protection Cabinets

104416Fire Extinguishers

104513 Photoluminescent Egress Path Markings

105500.13 Usps-Delivery Postal Specialties

105500.16 Private-Delivery Postal Specialties

DIVISION 11 - EQUIPMENT

113013 Residential Appliances

Refer to Appendix A – Appliances

DIVISION 12 - FURNISHINGS

123530 Residential Casework

123661.16 Solid Surfacing Countertops

Refer to Appendix A – SS-01

DIVISION 21 - FIRE SUPPRESSION

210513 Common Motor Requirements for Fire Suppression Equipment

210517 Sleeves and Sleeve Seals for Fire-Suppression Piping

210518 Escutcheons for Fire-Suppression Piping

210523 General-Duty Valves for Fire Protection Piping

210548.13 Vibration Controls for Fire-Suppression Piping and Equipment

210553 Identification for Fire-Suppression Piping and Equipment

210700 Fire-Suppression Systems Insulation

211100 Facility Fire-Suppression Water-Service Piping

211116 Facility Fire Hydrants

211119 Fire Department Connections

211200 Fire-Suppression Standpipes

EXHIBIT B

211213 Fire-Suppression Hoses and Nozzles

211313 Wet-Pipe Sprinkler Systems

213413 Pressure-Maintenance Pumps

DIVISION 22 - PLUMBING

220513 Common Motor Requirements for Plumbing Equipment

220516 Expansion Fittings and Loops for Plumbing Piping

220517 Sleeves and Sleeve Seals for Plumbing Piping

220518 Escutcheons for Plumbing Piping

220519 Meters and Gages for Plumbing Piping

220523.12 Ball Valves for Plumbing Piping

220523.13 Butterfly Valves for Plumbing Piping

220523.14 Check Valves for Plumbing Piping

220523.15 Gate Valves for Plumbing Piping

220529 Hangers and Supports for Plumbing Piping and Equipment

220548.13 Vibration Controls for Plumbing Piping and Equipment

220553 Identification for Plumbing Piping and Equipment

220716 Plumbing Equipment Insulation

220719 Plumbing Piping Insulation

221113 Facility Water Distribution Piping

221116 Domestic Water Piping

221119 Domestic Water Piping Specialties

221313 Facility Sanitary Sewers

221316 Sanitary Waste and Vent Piping

221319.13 Sanitary Drains

221429 Sump Pumps

223300 Electric, Domestic-Water Heaters

224100 Residential Plumbing Fixtures

EXHIBIT B

Refer to Appendix A - Plumbing

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITINING (HVAC)

To Be Determined

DIVISION 26 - ELECTRICAL

To Be Determined

DIVISION 27 – COMMUNICATIONS

To Be Determined

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

To Be Determined

DIVISION 31 - EARTHWORK

311000 Site Clearing

312000 Earth Moving

312319 Dewatering

313116 Termite Control

DIVISION 32 - EXTERIOR IMPROVEMENTS

321216 Asphalt Paving

321313 Concrete Paving

321713 Parking Bumpers

323113 Chain Link Fences and Gates

323223 Segmental Retaining Walls

323300 Site Furnishings

328400 Planting Irrigation

329113 Soil Preparation

329300 Plants

DIVISION 33 - UTILITIES

To Be Determined

EXHIBIT B

Appendix A

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
EXTERIOR					
DR-01		Entry Doors	Jeldwen Windows & Doors Craftsman Collection, Finish: Mahogany, Color: Cashmere, Glass: Waterglass, Fiberglass Door, Panel Design: Craftsman Item#: A362 Door	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
DR-02		Lanai Doors	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, 2 Panel Patio Door, screen door standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type C; See Door Scedule
DR-03		Exterior Closet Doors	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type G; See Door Scedule
DR-04		Exterior Washer/Dryer Door	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type F; See Door Scedule
DR-05		Electrical Closet Door	Pella Fiberglass Door Finish: Mahogany grain Color: TBD, Double swing door, Size: 7'-0"W x 6'-8"	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type H; See Door Scedule
DR-06		Interior Door	Simpson Door Company Ovation layered panel doors, 87101, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type B; See Door Schedule

EXHIBIT B

Project: Walkulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

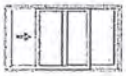
SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
DR-07		Interior Door/ADA at Closet	Jeldwen Windows & doors Plantation Louver doors & BifoldPatio Door, 2-1/4" Slats, Finish: Primed, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type K; See Door Schedule
DR-08		Interior Sliding Closet Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type D; See Door Schedule
DR-09		Interior Pocket Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type J; See Door Schedule
W-01		Windows	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, Horizontal Slider window, screen standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
PT-01		Exterior Door		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
PT-02		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
PT-03		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
SD-01		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Mountain Sage	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-02		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-03		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 8", Texture: Cedarmill, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-01		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-02		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
TM-03		Belly Band	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 11.25"W, Color: Cobble Stone	David Fukumoto P: 808-783-4975	Touch up paint to match.
EL-01		Entry Lanai	Pacific Polymers Elasto - Deck 5000 x 2, Polyurethane coating, 2 coating layers, Color: Pumice	Walsh and Company John Walsh P: 808-286-7283 E: john@walshandcompanyhi.com	
S-01		Stair Step Tread	Step Stone, Inc. Cabrc Steptreads, Classic Profile, Color: CR BS 504, French Gray	Building Systems Hawaii Bruce Buckman P: 1-808-885-0987 E: bystems@kona.net	
R-01a		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, CRRC Product ID 0668-0050, Energy Star, Color: Max Def Weathered Wood	Michael Bahrou P: 808-352-6965 E: michaeLc.bahrou@saint-gobain.com	
R-01b		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, Energy Star, Color: Max Def Resawn Shake	Michael Bahrou P: 808-352-6965 E: michaeLc.bahrou@saint-gobain.com	
R-02		Attic Vent	O'hagin Superior Attic Products O'hagin Attic vent for Composition shingleItem#: Color: Pre-painted (TBD), 72 SI NFVA	HPM Building Suppy P: 808-682-8560 E: oahu@hpmhawaii.com	

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
R-03		Ridge Ventilation	Cor-A-Vent, Inc. Cor-A-Vent, Style: Ridge Ventilation System, Color: Black, Item#: V-300	IIPM Building Suppy P: 808-682-8560 E: oahu@hpmhawaii.com	
APPLIANCES					
APP-01		Kitchen	Refrigerator Whirlpool 18.2 cu. ft. Top Freezer Refrigerator, Color: White; Size: 29-3/4"W x 33 1/2"D x 65-7/8" H Item#: WRT138FZDW	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
APP-02		Kitchen	Refrigerator Ice Maker Whirlpool Automatic Ice Maker Kit, Color: White, Item#: ECKMP9S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-03		Kitchen	Range & Cord Whirlpool 4.8 cu. Ft. Guided Electric Front Control Coil Range, Color: White; Size: 29 7/8"W x 29 15/16"D x 36" H, Item#: WEC31050FW, Range Cord: EZ-Flo, Item#: E61245	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-04	TBD	Kitchen	Ducted Range Hood 30" Range Hood	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	TBD
APP-05		Laundry Room	Washer & Cord Whirlpool Electric Range Cord, 1.9 cu. ft., Compact Washer w/ Detergent Dosing Aid, Color: White; Size: 24"W x 24"D x 33 1/4" H, Item#: WWFW3090GW, Washer Cord: Profile, Item#: PFWMH6PR	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
APP-06		Laundry Room	Dryer & Cord Whirlpool 4.3 cu. ft., Compact Dryer, Color: White; Size: 24"W x 25 3/4"D x 33 5/8" H, Item#: WWHD3090GW, Dryer Cord: EZ-Flo, Item#: E61253	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
APP-07		Laundry Room	Washer/Dryer Stack Kit Whirlpool Stack Kit - 24", Color: White, Item#: W10882520	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-08		Laundry Room	Washer/Dryer ADA Unit Laundry Room Summit 24" Wide Washer/Dryer Combo for non-vented use, with 15 lbs. wash capacity, 2 cu. ft. drum, Color: White; Size: 23.38"W x 24.25"D x 33.25" H, Item#: SPWD2200W	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
PLUMBING					
WC-01		Bathrooms	Toilet @ Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl Windham White, Item #: 54032150, Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item#: 54045510 Kohler, QR EB Closet Seat Brevia White, Item#:K4774-0	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
WC-02		Bathrooms	Toilet @ ADA Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl ADA Windham White, Item #: 54033150 Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item #: 54045510, Kohler, QR EB Closet Seat Brevia White	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-01	TBD	Bathrooms	Lavatory @ Unit Bathrooms Cultured Marble Vanity Top	Naia's Marble Co. LLC P: 808-841-5434 E: naiasmarblehawaii.com	TBD
LAV-02		Bathrooms	Lavatory @ Unit Bathrooms Sterling Stinson UC Lav White Item #: 5442007UO	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
LAV-03		Bathrooms	Lavatory @ ADA Unit Bathrooms Pedestal Sterling 4 VC PED Lav Bowlsacram White PED Onlysacram White Item #: 54461240 (Bowl) & 54481200 (Pedestal)	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-04		Bathrooms	Lavatory @ ADA & Unit Bathrooms Kohler Lavatory Faucet, Polished Chrome 1.5 Gallon Per minute 2 Handle Center Set Item #: K5316-4-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-01		Bathrooms	Tub/Shower @ ADA & Unit Bathrooms Sterling 60x30 LF Vikrell Bath Accord White Item #: 5711411100	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-02		Bathrooms	Tub/Shower Enclosure @ Unit Bathrooms Sterling Smooth Comp Wall Setaccord White Item #: 5712441000	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-03		Bathrooms	Tub/Shower Fixtures @ Unit & ADA Bathrooms Kohler Refinia, CCY 2.5 Handle, Tub and Shower Trim Only Polished Chrome Item #: K-T531B-4-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
EXTERIOR					
DR-01		Entry Doors	Jeldwen Windows & Doors Craftsman Collection, Finish: Mahogany, Color: Cashmere, Glass: Waterglass, Fiberglass Door, Panel Design: Craftsman Item#: A362 Door	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
DR-02		Lanai Doors	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, 2 Panel Patio Door, screen door standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type C; See Door Scedule
DR-03		Exterior Closet Doors	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type G; See Door Scedule
DR-04		Exterior Washer/Dryer Door	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type F; See Door Scedule
DR-05		Electrical Closet Door	Pella Fiberglass Door Finish: Mahogany grain Color: TBD, Double swing door, Size: 7'-0"W x 6'-8"	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type H; See Door Scedule
DR-06		Interior Door	Simpson Door Company Ovation layered panel doors, 67101, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type B; See Door Schedule

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
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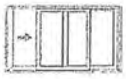
SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
DR-07		Interior Door/ADA at Closet	Jeldwen Windows & doors Plantation Louver doors & BifoldPatio Door, 2-1/4" Slats. Finish: Primed, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type K; See Door Schedule
DR-08		Interior Sliding Closet Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type D; See Door Schedule
DR-09		Interior Pocket Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type J; See Door Schedule
W-01		Windows	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, Horizontal Slider windows, screen standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
PT-01		Exterior Door		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
PT-02		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD

EXHIBIT B

Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
PT-03		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
SD-01		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Mountain Sage	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-02		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-03		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 8", Texture: Cedarmill, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-01		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-02		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.

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Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
TM-03		Belly Band	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 11.25"W, Color: Cobble Stone	David Fukumoto P: 808-783-4975	Touch up paint to match.
EL-01		Entry Lanai	Paelfic Polymers Elasto - Deck 5000 x 2, Polyurethane coating, 2 coating layers, Color: Pumice	Walsh and Company John Walsh P: 808-286-7283 E: john@walshandcompanyhi.com	
S-01		Stair Step Tread	Step Stone, Inc. Cabre Steptreads, Classic Profile, Color: CR BS 504, French Gray	Building Systems Hawaii Bruce Buckman P: 1-808-885-0987 E: bystems@kona.net	
R-01a		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, CRRC Product ID 0668-0050, Energy Star, Color: Max Def Weathered Wood	Michael Bahrou P: 808-352-6965 E: michael.c.bahrou@saint-gobain.com	
R-01b		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, Energy Star, Color: Max Def Resawn Shake	Michael Bahrou P: 808-352-6965 E: michael.c.bahrou@saint-gobain.com	
R-02		Attic Vent	O'hagin Superior Attic Products O'hagin Attic vent for Composition shingleItem#: Color: Pre-painted (TBD), 72.SI NFVA	HPM Building Suppy P: 808-682-0560 E: oahu@hpmhawaii.com	

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Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
R-03		Ridge Ventilation	Cor-A-Vent, Inc. Cor-A-Vent, Style: Ridge Ventilation System, Color: Black, Item#: V-300	HPM Building Suppy P: 808-682-8560 E: oahu@hpmbuwoil.com	
APPLIANCES					
APP-01		Kitchen	Refrigerator Whirlpool 18.2 cu. ft. Top Freezer Refrigerator, Color: White; Size: 29-3/4"W x 33 1/2"D x 65-7/8" H Item#: WRT138FZDW	Ferguson Clayton Goml P: 808-832-7419 E: Clayton.Goml@Ferguson.com	Energy Star
APP-02		Kitchen	Refrigerator Ice Maker Whirlpool Automatic Ice Maker Kit, Color: White, Item#: ECKMFPS	Ferguson Clayton Goml P: 808-832-7419 E: Clayton.Goml@Ferguson.com	
APP-03		Kitchen	Range & Cord Whirlpool 4.8 cu. ft. Guided Electric Front Control Coil Range, Color: White; Size: 29 7/8"W x 29 15/16"D x 36" H, Item#: WEC31050FW, Range Cord: EZ-Flo, Item#: E61245	Ferguson Clayton Goml P: 808-832-7419 E: Clayton.Goml@Ferguson.com	
APP-04	TBD	Kitchen	Ducted Range Hood 30" Range Hood	Ferguson Clayton Goml P: 808-832-7419 E: Clayton.Goml@Ferguson.com	TBD
APP-05		Laundry Room	Washer & Cord Whirlpool Electric Range Cord, 1.9 cu. ft., Compact Washer w/ Detergent Dosing Aid, Color: White; Size: 24"W x 24"D x 33 1/4" H, Item#: WWFW3090GW, Washer Cord: Profle, Item#: PFWMH6PR	Ferguson Clayton Goml P: 808-832-7419 E: Clayton.Goml@Ferguson.com	Energy Star
APP-06		Laundry Room	Dryer & Cord Whirlpool 4.3 cu. ft., Compact Dryer, Color: White; Size: 24"W x 25 3/4"D x 33 5/8" H, Item#: WWH03090GW, Dryer Cord: EZ-Flo, Item#: E61253	Ferguson Clayton Goml P: 808-832-7419 E: Clayton.Goml@Ferguson.com	Energy Star

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
APP-07		Laundry Room	Washer/Dryer Stack Kit Whirlpool Stack Kit - 24", Color: White, Item#: W10882520	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-08		Laundry Room	Washer/Dryer ADA Unit Laundry Room Summit 24" Wide Washer/Dryer Combo for non-vented use, with 15 lbs. wash capacity, 2 cu. ft. drum, Color: White; Size: 23.38"W x 24.25"D x 33.25" H, Item#: SPWD2200W	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
PLUMBING					
WC-01		Bathrooms	Toilet @ Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl Windham White, Item #: 54032150, Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item#: S4045510 Kohler, QR EB Closet Seat Brevia White, Item#:K4774-0	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
WC-02		Bathrooms	Toilet @ ADA Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl ADA Windham White, Item #: 54033150 Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item #: S4045510, Kohler, QR EB Closet Seat Brevia White	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-01	TBD	Bathrooms	Lavatory @ Unit Bathrooms Cultured Marble Vanity Top	Naka's Marble Co. LLC P: 808-841-5434 E: nakasmarblehawaii.com	TBD
LAV-02		Bathrooms	Lavatory @ Unit Bathrooms Sterling Stinson UC Lav White Item #: 5442007100	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
EXTERIOR					
DR-01		Entry Doors	Jeldwen Windows & Doors Craftsman Collection, Finish: Mahogany, Color: Cashmere, Glass: Waterglass, Fiberglass Door, Panel Design: Craftsman Item#: A362 Door	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
DR-02		Lanai Doors	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, 2 Panel Patio Door, screen door standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type C; See Door Scedule
DR-03		Exterior Closet Doors	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type G; See Door Scedule
DR-04		Exterior Washer/Dryer Door	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type F; See Door Scedule
DR-05		Electrical Closet Door	Pella Fiberglass Door Finish: Mahogany grain Color: TBD, Double swing door, Size: 7'-0"W x 6'-8"	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type H; See Door Scedule
DR-06		Interior Door	Simpson Door Company Ovation layered panel doors, 87101, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type B; See Door Schedule

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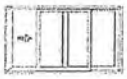
SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
DR-07		Interior Door/ADA at Closet	Jeldwen Windows & doors Plantation Louver doors & BifoldPatio Door, 2-1/4" Slats, Finish: Primed, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type K; See Door Schedule
DR-08		Interior Sliding Closet Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type D; See Door Schedule
DR-09		Interior Pocket Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type J; See Door Schedule
W-01		Windows	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, Horizontal Slider window, screen standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
PT-01		Exterior Door		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
PT-02		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
PT-03		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
SD-01		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Mountain Sage	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-02		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-03		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 8", Texture: Cedarmill, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-01		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-02		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
TM-03		Belly Band	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 11.25"W, Color: Cobble Stone	David Fukumoto P: 808-783-4975	Touch up paint to match.
EL-01		Entry Lanai	Pacific Polymers Elasto - Deck 5000 x 2, Polyurethane coating, 2 coating layers, Color: Pumice	Walsh and Company John Walsh P: 808-286-7283 E: john@walshandcompanyhi.com	
S-01		Stair Step Tread	Step Stone, Inc. Colorc Stepreads, Classic Profile, Color: CR BS 504, French Gray	Building Systems Hawaii Bruce Buckman P: 1-866-885-0987 E: bystems@kona.net	
R-01a		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, CRRC Product ID 0668-0050, Energy Star, Color: Max Def Weathered Wood	Michael Bahrou P: 808-352-6965 E: michael.c.bahrou@saint-gobain.com	
R-01b		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, Energy Star, Color: Max Def Resawn Shake	Michael Bahrou P: 808-352-6965 E: michael.c.bahrou@saint-gobain.com	
R-02		Attic Vent	O'hagin Superior Attic Products O'hagin Attic vent for Composition shingleItem#: Color: Pre-painted (TBD), 72 SI NFVA	HPM Building Suppy P: 808-682-8560 E: oahu@hpmhawaii.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
R-03		Ridge Ventilation	Cor-A-Vent, Inc. Cor-A-Vent, Style: Ridge Ventilation System, Color: Black, Item#: V-300	HPM Building Suppy P: 808-682-8560 E: oahu@hpmhawaii.com	
APPLIANCES					
APP-01		Kitchen	Refrigerator Whirlpool 18.2 cu. ft. Top Freezer Refrigerator, Color: White; Size: 29-3/4"W x 33 1/2"D x 65-7/8" H Item#: WRT138FZDW	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
APP-02		Kitchen	Refrigerator Ice Maker Whirlpool Automatic Ice Maker Kit, Color: White, Item#: ECKMF95	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-03		Kitchen	Range & Cord Whirlpool 4.8 cu. Ft. Guided Electric Front Control Coil Range, Color: White; Size: 29 7/8"W x 29 15/16"D x 36" H, Item#: WEC310S0FW, Range Cord: EZ-Flo, Item#: E61245	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-04	TBD	Kitchen	Ducted Range Hood 30" Range Hood	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	TBD
APP-05		Laundry Room	Washer & Cord Whirlpool Electric Range Cord, 1.9 cu. ft., Compact Washer w/ Detergent Dosing Aid, Color: White; Size: 24"W x 24"D x 33 1/4" H, Item#: WWFW3090GW, Washer Cord: Prolio, Item#: PPWMH6PR	Ferguson Clayton Gomi P: 808-832-7419 E: Claytnn.Gomi@Ferguson.com	Energy Star
APP-06		Laundry Room	Dryer & Cord Whirlpool 4.3 cu. ft., Compact Dryer, Color: White; Size: 24"W x 25 3/4"D x 33 5/8" H, Item#: WWHD3090GW, Dryer Cord: EZ-Flo, Item#: E61253	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
APP-07		Laundry Room	Washer/Dryer Stack Kit Whirlpool Stack Kit - 24", Color: White, Item#: W10802520	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-08		Laundry Room	Washer/Dryer ADA Unit Laundry Room Summit 24" Wide Washer/Dryer Combo for non-vented use, with 15 lbs. wash capacity, 2 cu. ft. drum, Color: White; Size: 23.38"W x 24.25"D x 33.25" H, Item#: SPWD2200W	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
PLUMBING					
WC-01		Bathrooms	Toilet @ Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl Windham White, Item #: 54032150, Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item#: 54045510 Kohler, QR EB Closet Seat Brevia White, Item#:K4774-0	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
WC-02		Bathrooms	Toilet @ ADA Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl ADA Windham White, Item #: 54033150 Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item #: 54045510, Kohler, QR EB Closet Seat Brevia White	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-01	TBD	Bathrooms	Lavatory @ Unit Bathrooms Cultured Marble Vanity Top	Naka's Marble Co. LLC P: 808-841-5434 E: nakasmarblehawaii.com	TBD
LAV-02		Bathrooms	Lavatory @ Unit Bathrooms Sterling Stinson UC Lav White Item #: 5442007UO	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
LAV-03		Bathrooms	Lavatory @ ADA Unit Bathrooms Pedestal Sterling 4 VC PED Lav Bowlsecram White PED Onlysecram White Item #: 54461240 (Bowl) & 54481200 (Pedestal)	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-04		Bathrooms	Lavatory @ ADA & Unit Bathrooms Kohler Lavatory Faucet, Polished Chrome 1.5 Gallon Per minute 2 Handle Center Set Item #: K5316-4-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-01		Bathrooms	Tub/Shower @ ADA & Unit Bathrooms Sterling 60x30 LF Vikrell Bath Accord White Item #: 571141100	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-02		Bathrooms	Tub/Shower Enclosure @ Unit Bathrooms Sterling Smooth Comp Wall Setaccord White Item #: 5712441000	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-03		Bathrooms	Tub/Shower Fixtures @ Unit & ADA Bathrooms Kohler Refinia, CCY 2.5 Handle, Tub and Shower Trim Only Polished Chrome Item #: K-T5318-4-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
EXTERIOR					
DR-01		Entry Doors	Jeldwen Windows & Doors Craftsman Collection, Finish: Mahogany, Color: Cashmere, Glass: Waterglass, Fiberglass Door, Panel Design: Craftsman Item#: A362 Door	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
DR-02		Lanai Doors	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, 2 Panel Patio Door, screen door standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type C; See Door Scedule
DR-03		Exterior Closet Doors	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type G; See Door Scedule
DR-04		Exterior Washer/Dryer Door	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type F; See Door Scedule
DR-05		Electrical Closet Door	Pella Fiberglass Door Finish: Mahogany grain Color: TBD, Double swing door, Size: 7'-0"W x 6'-8"	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type H; See Door Scedule
DR-06		Interior Door	Simpson Door Company Ovation layered panel doors, 87101, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type B; See Door Schedule

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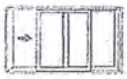
SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
DR-07		Interior Door/ADA at Closet	Jeldwen Windows & doors Plantation Louver doors & BifoldPatio Door, 2-1/4" Slats, Finish: Primed, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type K; See Door Schedule
DR-08		Interior Sliding Closet Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type D; See Door Schedule
DR-09		Interior Pocket Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type J; See Door Schedule
W-01		Windows	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, Horizontal Slider window, screen standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
PT-01		Exterior Door		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
PT-02		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
PT-03		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
SD-01		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Mountain Sage	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-02		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-03		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 8", Texture: Cedarmill, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-01		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-02		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
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Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
TM-03		Belly Band	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 11.25"W, Color: Cobble Stone	David Fukumoto P: 808-703-4975	Touch up paint to match.
EL-01		Entry Lanai	Pacific Polymers Elasto - Deck 5000 x 2, Polyurethane coating, 2 coating layers, Color: Pumice	Walsh and Company John Walsh P: 808-286-7283 E: John@walshandcompanyhi.com	
S-01		Stair Step Tread	Step Stone, Inc. Cabre Steptreads, Classic Profile, Color: CR BS 504, French Gray	Building Systems Hawaii Bruce Buckman P: 1-808-885-0987 E: bystems@kona.net	
R-01a		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, CRRC Product ID 0668-0050, Energy Star, Color: Max Def Weathered Wood	Michael Bahrou P: 800-352-6965 E: michael.c.bahrou@saint-gobain.com	
R-01b		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, Energy Star, Color: Max Def Resawn Shake	Michael Bahrou P: 800-352-6965 E: michael.c.bahrou@saint-gobain.com	
R-02		Attic Vent	O'hagin Superior Attic Products O'hagin Attic vent for Composition shingleItem#: Color: Pre-painted (TDD), 72 SI NFVA	HPM Building Suppy P: 808-682-8560 E: oahu@hpmhawaii.com	

EXHIBIT B

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
R-03		Ridge Ventilation	Cor-A-Vent, Inc. Cor-A-Vent, Style: Ridge Ventilation System, Color: Black, Item#: V-300	HPM Building Suppy P: 808-682-0560 E: oahu@hpmbuild.com	
APPLIANCES					
APP-01		Kitchen	Refrigerator Whirlpool 18.2 cu. ft. Top Freezer Refrigerator, Color: White; Size: 29-3/4"W x 33 1/2"D x 65-7/8" H Item#: WRT138FZDW	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
APP-02		Kitchen	Refrigerator Ice Maker Whirlpool Automatic Ice Maker Kit, Color: White, Item#: ECKMF9S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-03		Kitchen	Range & Cord Whirlpool 4.8 cu. Ft. Guided Electric Front Control Coil Range, Color: White; Size: 29 7/8"W x 29 15/16"D x 36" H, Item#: WEC31050FW, Range Cord: EZ-Flo, Item#: E61245	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-04	TBD	Kitchen	Ducted Range Hood 30" Range Hood	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	TBD
APP-05		Laundry Room	Washer & Cord Whirlpool Electric Range Cord, 1.9 cu. ft., Compact Washer w/ Detergent Dosing Aid, Color: White; Size: 24"W x 24"D x 33 1/4" H, Item#: WWFW3090GW, Washer Cord: Pnello, Item#: PPWMH6PR	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
APP-06		Laundry Room	Dryer & Cord Whirlpool 4.3 cu. ft., Compact Dryer, Color: White; Size: 24"W x 25 3/4"D x 33 5/8" H, Item#: WWHD3090GW, Dryer Cord: EZ-Flo, Item#: E61253	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star

EXHIBIT B

Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
APP-07		Laundry Room	Washer/Dryer Stack Kit Whirlpool Stack Kit - 24", Color: White, Item#: W10882520	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-08		Laundry Room	Washer/Dryer ADA Unit Laundry Room Summit 24" Wide Washer/Dryer Combo for non-vented use, with 15 lbs. wash capacity, 2 cu. ft. drum, Color: White; Size: 23.38"W x 24.25"D x 33.25" H, Item#: SPWD2200W	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
PLUMBING					
WC-01		Bathrooms	Toilet @ Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl Windham White, Item #: 54032150, Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item#: 54045510 Kohler, QR EB Closet Seat Brevia White, Item#:K4774-0	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
WC-02		Bathrooms	Toilet @ ADA Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl ADA Windham White, Item #: 54033150 Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item #: 54045510, Kohler, QR EB Closet Seat Brevia White	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-01	TBD	Bathrooms	Lavatory @ Unit Bathrooms Cultured Marble Vanity Top	Nakas Marble Co. LLC P: 808-841-5434 E: nakasmarblehawaii.com	TBD
LAV-02		Bathrooms	Lavatory @ Unit Bathrooms Sterling Stinson UC Lav White Item #: 5442007U0	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

EXHIBIT B

Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
LAV-03		Bathrooms	Lavatory @ ADA Unit Bathrooms Pedestal Sterling 4 VC PED Lav Bowlsacram White PED Onlysacram White Item #: 54461240 (Bowl) & 54481200 (Pedestal)	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-04		Bathrooms	Lavatory @ ADA & Unit Bathrooms Kohler Lavatory Faucet, Polished Chrome 1.5 Gallon Per minute 2 Handle Center Set Item #: K5316-4-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-01		Bathrooms	Tub/Shower @ ADA & Unit Bathrooms Sterling 60x30 LF Vikrell Bath Accord White Item #: 5711411100	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-02		Bathrooms	Tub/Shower Enclosure @ Unit Bathrooms Sterling Smooth Comp Wall Setaccord White Item #: 5712441000	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-03		Bathrooms	Tub/Shower Fixtures @ Unit & ADA Bathrooms Kohler Refinia, CCV 2.5 Handle, Tub and Shower Trim Only Polished Chrome Item #: K-T5318-4-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

EXHIBIT B

Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
SH-04		Bathrooms	Tub/Shower Enclosure @ Unit ADA Bathrooms Sterling Accord 60x30 Wall Set with Grab Bars Item #: 57124410 3V0	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-05		Bathrooms	Tub/Shower Enclosure @ Unit ADA Bathrooms Accord 36"x36" Shower with Grab Bars Item #: 72240103-V	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-06		Bathrooms	Tub/Shower Drain 2" Brass Self-Caulking Drain Item #: PF140NC	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-07		Bathrooms	Tub/Shower Pressure Balance Valve Kohler 2.5 Gallons Per Minute Wall Mount Pressure Balance Valve Rite -Temp Item #: KP304-KS-NA	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-08		Bathrooms	Tub/Shower Bath Drain Plastic Tubular Profio W & O Plastic Tubular, 1-1/2" Plastic Tubular, Trip Lever, ADJ, Chrome Plated Trim Item #: PFWO402	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
K-01		Kitchen	Sink @ Kitchen Sterling Southhaven, Top Mount Kitchen Sink, single hole faucet with escutcheon plates, 25"X 22"x 8"Bowl Depth, Stainless Steel Item #: 5114053NA	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

EXHIBIT B

Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
K-02		Kitchen	Sink @ ADA Kitchen Sterling Southhaven, Top Mount Kitchen Sink, single hole faucet with escutcheon plates, 25"X 22"x 6-1/2"Bowl Depth, 1B, SGL PK, Stainless Steel Item #: 5114033NA	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
K-03		Kitchen	Faucet @ ADA & Unit Kitchen Kohler Simplice, Pull-Down Kitchen Sink Faucet, CCY Lead Law Compliant, 1.8 gpm, Polished Chrome Item #: K596-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
K-04		Kitchen	Garbage Disposal In Sink Erator (ISE) 1/2 HP Garbage Disposal w/Cord Item #: IBADGER5WC	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
BATH ACCESSORIES					
ACC-01		Bathrooms	Towel Bar Kohler Alteo, 24 Towel Bar, Polished Chrome Item #: K37051-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-02		Bathrooms	Toilet Tissue Holder Kohler Alteo, Pivoting Tissue Holder, Polished Chrome Item #: K37054-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-03		Bathrooms	Robe Hook Kohler Alteo, Robe Hook, Polished Chrome Item #: K37055-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-04		Bathrooms	Shower Rod Kohler Expanse, Curved Shower Rod - Traditional Design, Polished Stainless Item #: K-9349-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

EXHIBIT B

Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
ACC-05		ADA Bathrooms	12" Grab Bar Kohler Contemporary, 12" grab bar, Color: Polished Stainless, Item #: K-14560-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-06		ADA Bathrooms	24" Grab Bar Kohler Contemporary, 24" grab bar, Color: Polished Stainless, Item #: K-14562-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-07		ADA Bathrooms	36" Grab Bar Kohler Contemporary, 36" grab bar, Color: Polished Stainless, Item #: K-14564-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-08		ADA Bathrooms	42" Grab Bar Kohler Contemporary, 42"grab bar, Color: Polished Stainless, Item #: K-10545-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LIGHTING					
LM-01		Hallway, Kitchen Sink, & Bath	Nora/Nepoc Lighting 6" LED Opal Series, Surface mounted light fixture, Finish: TBD, Size: 7 1/4"W x 2 1/2"H, Model # NLOP-R650930A	Nora Lighting E: www.noralighting.com	Energy Star
LM-01NL		Common Entry NL	Liton Round ceiling downlight, Finish: TBD, Size: 5 11/16"W x 4 ¾"H, Model # DL360	Liton P: 800-515-4880 E: www.liton.zemagroup.com	Energy Star
LM-02		Kitchen	E Lighting Ceiling mount, Finish: Frosted glass Color: TBD, Size: 13"W x 5"H, Model # 4372	Dimensions Electrical Inc. Dorene Martin P: 808-955-6111 E: dmartin@dimensionselectrical.com	Energy Star

EXHIBIT B

Project: Waikulu Workforce Apartments
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Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
LM-04		Bathroom Vanity	E Lighting Wall mount, Finish: Frosted checkered glass Color:TBD, Size: 20 1/2"W x 7"H x 4" Ext, Model # 6833	Dimensions Electrical Inc. Dorene Martin P: 808-955-6111 E: dmartin@dimensionselectrical.com	Energy Star
LM-06		Lanai	Liton Round ceiling downlight, Finish: TBD, Size: 5 11/16"W x 4 ¾"H, Model #: DL360	Liton P: 800-515-4800 E: www.liton.eemagroup.com	Energy Star
LM-07		Stair NL	Brownlee Lighting Wall mounted light Fixture, Finish: Standard Bronze polyester powder coat, Size: 11"W x 5.75"H x 8.5"D, Model #: 7046 LED	Brownlee Lighting P: 800-318-6768 E: www.rownlee.com	Energy Star
EF-01		Ground Floor Bathrooms	Greenheck, Toilet Exhaust, Model #: SP-B80	Greenheck P: 715-359-6171 E: www.greenheck.com	Or Equal
EF-02		Second Floor Bathrooms	Greenheck, Toilet Exhaust, Model #: SP-B70	Greenheck P: 715-359-6171 E: www.greenheck.com	Or Equal
FN-01		Interior	Minka Aire Contractor 52 Ceiling Fan, Finish: White, Item #: F547-WH	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
E-01		Kitchen Receptical	Leviton USB Dual Charger Receptacle - White, 15 AMP Item #: Leviton T5632-W	Leviton P: 800-323-8920 E: www.leviton.com	
INTERIOR FINISHES					

EXHIBIT B

Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
FL-01	TBD	Flooring	Vinyl	Pro Source Vinda Campos P: 808-423-0927 E: vinda.campos@prosourcehon.com	TBD Moisture Test Required
SS-01	TBD	Counter Tops	Cultured Marble	Naka's Marble Co. LLC P: 808-841-5434 E: nakasmarblehawaii.com	TBD
CAB-01	TBD	Cabinets	Wood Cabinets	C & C Cabinets Jackie He P: 808-853-2088 E: jackie@cccabinetsgranite.com	TBD
PT-10		Interior Paint	Sherwin-Williams, Item#: SW 7566 Westhighland White	Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD

EXHIBIT B

State of Hawaii - Hawaii Housing Finance and Development Corporation
201H Application – Wailuku Workforce Apartments, Wailuku, Maui
Submitted by Legacy Wailuku LLC

Legacy Partners Housing Development Experience

Name: Legacy Partners

Copy format and add pages as needed

	Name of Property, Address	Capacity of Applicant/ Developer	Type of Project	City, State	Number of Units		Financing/ Subsidy Program Utilized	Status of Project
					Affordable	Market		
1	Youngstown Flats 440 26th Ave SW Seattle, WA 98106	Fee Developer and Property Manager	Midrise Apartments	Seattle, WA	39 units affordable to between 65%-85% of AMI	156	Seattle Multifamily Tax Exemption Program	Operating for 4 years
2	Milehouse Apartments 8300 160th Ave NE, Redmond, WA	Developer / Managing Member / Property Manager	Mixed-Use – Mixed Income	Redmond, WA	17 units affordable to 80% of AMI	160	Redmond ARCH Affordability Program (No subsidy)	Operated for 2 years – Recently sold.
3	Bowman Apartments	Developer / Managing Member / Property Manager	Mixed-Use / Mixed Income	Seattle, WA	55 units affordable between 65% and 85% of AMI	223	Seattle Multifamily Tax Exemption Program	Operating for 1 year
4	Hadley Apartments	Developer / Managing Member /Property Manager	Mixed-Use / Mixed- Income	Mercer Island, WA	14 units affordable to 70% of AMI	195	Mercer Island ARCH Affordability Program (No subsidy)	Operating for .5 years
5	Lakeview Apartments	Developer / General Partner	Low Income	Tooele, UT	76	0	LIHTC	Sold in 2015

EXHIBIT C

State of Hawaii - Hawaii Housing Finance and Development Corporation
201H Application – Wailuku Workforce Apartments, Wailuku, Maui
Submitted by Legacy Wailuku LLC

6	Fox Crossing	Developer / General Partner	Low Income	Denver, CO	246	0	LIHTC	Operating for 21 years
7	Legacy Bungalows	Developer / General Partner	Mixed-Income	Phoenix, AZ	82 units affordable to between 50% and 60% of AMI	118	T/E Bond and LIHTC	Operating for 16 years
8	Hollywood & Vine	Developer / General Partner	Mixed-Income	Los Angeles, CA	75 units affordable to 50% of AMI	300	T/E Bond	Sold in 2012
9	Memorial Apartments	Developer / General Partner	Mixed-Income	Houston, TX	66 units affordable to 50% of AMI	264	N/A	Sold in 2010
10	Legacy at Main & Jamboree	Developer / General Partner	Mixed-Income	Irvine, CA	58 units affordable to 50% of AMI	232	N/A	Sold in 2007
11	Neptune Marina	Developer / General Partner	Mixed-Income	Marina Del Rey, CA	79 units affordable to 50% of AMI	421	Below MR Ground Lease	Operating
12	San Carlos	Developer / General Partner	Mixed-Income	San Carlos, CA	20 units affordable between 50% & 60% of AMI	182	N/A	Under Development
13	Legacy Fountain Plaza	Developer / General Partner	Mixed-Income	San Jose, CA	55 units affordable between 50% & 60%	312	N/A	Sold in 2011

EXHIBIT C

					of AMI			
14	Legacy at Museum Park	Developer / General Partner	Mixed-Income	San Jose, CA	18 units affordable between 50% & 60% of AMI	99	N/A	Sold in 2010

EXHIBIT C

LETTERS RECEIVED DURING THE DRAFT ENVIRONMENTAL ASSESSMENT REVIEW PERIOD AND RESPONSES TO SUBSTANTIVE COMMENTS

The Draft Environmental Assessment (EA) for the subject project was filed and published in the Office of Environmental Quality Control's Environmental Notice on April 8, 2018. The following agencies, organizations, and individuals were sent a copy of the Draft EA. Comments on the Draft EA were received during the 30-day public comment period.

FEDERAL AGENCIES

1. **Natural Resources Conservation Service**
   U.S. Department of Agriculture
   210 Imi Kala Street, Suite 209 Wailuku, Hawai'i 96793-2100

2. Tunis W. McElwain
   Chief, Regulatory Branch
   U.S. Department of the Army
   U.S. Army Engineer District, Honolulu
   Regulatory Branch
   Building 230
   Fort Shafter, Hawai'i 96858-5440

3. Michelle Bogardus
   Island Team Leader
   U. S. Fish and Wildlife Service
   300 Ala Moana Blvd., Rm. 3-122
   Honolulu, Hawai'i 96850

STATE AGENCIES

4. Christina Kishimoto, Superintendent
   State of Hawai'i
   Department of Education
   P.O. Box 2360
   Honolulu, Hawai'i 96804

5. Virginia "Ginny" Pressler, MD, MBA, FACS, Director
   State of Hawai'i
   Department of Health
   919 Ala Moana Blvd., Room 300
   Honolulu, Hawai'i 96814

6. Laura McIntyre, AICP
   State of Hawai'i
   Department of Health
   Environmental Planning Office
   919 Ala Moana Blvd., Suite 312
   Honolulu, Hawai'i 96814

7. Suzanne Case, Chairperson
   State of Hawai'i
   Department of Land and Natural Resources
   P. O. Box 621
   Honolulu, Hawai'i 96809

8. Alan Downer, Administrator
   State of Hawai'i
   Department of Land and Natural Resources
   State Historic Preservation Division
   601 Kamokila Blvd., Room 555
   Kapolei, Hawai'i 96707

9. Jade Butay, Interim Director
   State of Hawai'i
   Department of Transportation
   869 Punchbowl Street
   Honolulu, Hawai'i 96813

10. Thomas Travis, Administrator
    Hawai'i Emergency Management
    Office of Director of Emergency Management
    Civil Defense
    3949 Diamond Head Road
    Honolulu, Hawai'i 96816

11. Dr. Kamana'opono Crabbe, Chief Executive Officer
State of Hawai'i
Office of Hawaiian Affairs
560 N. Nimitz Highway, Suite 200
Honolulu, Hawai'i 96817

12. Leo R. Asuncion, Jr., AICP, Director
State of Hawai'i
Office of Planning
P. O. Box 2359
Honolulu, Hawai'i 96804

13. Dan Orodenker, Executive Officer
State of Hawai'i
State Land Use Commission
P.O. Box 2359
Honolulu, Hawai'i 96804

14. Roderick Becker, Comptroller
State of Hawai'i
Department of Accounting and General Services
1151 Punchbowl Street, #426
Honolulu, Hawai'i 96813

15. Luis P. Salaveria, Director
State of Hawai'i
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawai'i 96804

16. Scott Enright, Chair
State of Hawai'i
Department of Agriculture
1428 South King Street
Honolulu, Hawai'i 96814-2612

17. **State of Hawai'i**
Department of Business, Economic Development & Tourism
Research Division Library
No. 1 Capitol District Building
250 S. Hotel Street, Suite 435
Honolulu, Hawai'i 96813

18. Heidi Meeker
State of Hawai'i
Department of Education
Office of Business Services
c/o Kalani High School
4680 Kalaniana'ole Highway, #T-B1A
Honolulu, Hawai'i 96821

19. **State of Hawai'i**
Department of Education
Office of Planning
3633 Waialae Avenue, Room C-209
Honolulu, Hawai'i 96816

20. Lene Ichinotsubo
State of Hawai'i
Department of Health
919 Ala Moana Blvd., Room 212
Honolulu, Hawai'i 96814

21. Alec Wong, P.E., Chief
State of Hawai'i
Department of Health
Clean Water Branch
Hale Ola, Room 225
2827 Waimano Home Road
Pearl City, Hawai'i 96782

22. **State of Hawai'i**
Department of Health
Environmental Health Administration
P.O. Box 3378
Honolulu, Hawai'i 96801

23. Patti Kitkowski
State of Hawai'i
Department of Health
Maui Sanitation Branch
54 South High Street, Room 300
Wailuku, Hawai'i 96793

24. Linda Chu Takayama, Director
State of Hawai'i
Department of Labor and Industrial Relations
830 Punchbowl St #321
Honolulu, Hawai'i 96813

25. Barker Farris
State of Hawai'i
Department of Land and Natural Resources
State Historic Preservation Division
101 Maalaea Boat Harbor Road
Wailuku, Hawai'i 96793

26. Nolan Espinda, Director
State of Hawai'i
Department of Public Safety
919 Ala Moana Boulevard, 4th Floor
Honolulu, Hawai'i 96814

27. Marvin Moniz, District Manager Islands of Maui, Moloka'i, and Lāna'i
State of Hawai'i
Department of Transportation
Airports Division
1 Kahului Airport Road, Unit 5
Kahului, Hawai'i 96732

28. Jobie Masagatani, Chair
State of Hawai'i
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, Hawai'i 96805

29. Scott Glenn, Director
State of Hawai'i
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawai'i 96813

30. Senator Gil Keith-Agaran
Hawai'i State Senate
Hawai'i State Capitol, Room 221
415 S. Beretania Street
Honolulu, Hawai'i 96813

COUNTY AGENCIES

32. Stewart Stant, Director
County of Maui
Department of Environmental Management
2050 Main Street, Suite 2B
Wailuku, Hawai'i 96793

33. Jeffrey A. Murray, Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawai'i 96732

34. Carol Reimann, Director
County of Maui
Department of Housing and Human Concerns
One Main Plaza
2200 Main Street, Suite 546
Wailuku, Hawai'i 96793

35. Ka'ala Buenconsejo, Director
County of Maui
Department of Parks and Recreation
700 Hali'a Nakoa Street, Unit 2F
Wailuku, Hawai'i 96793

36. William Spence, Director
County of Maui
Department of Planning
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

37. Tivoli Faaumu, Chief
County of Maui
Department of Police
55 Mahalani Street
Wailuku, Hawai'i 96793

38. David Goode, Director
County of Maui
Department of Public Works
200 South High Street, 4th Floor
Wailuku, Hawai'i 96793

39. Don Medeiros, Director
County of Maui
Department of Transportation
2145 Kaohu Street
David Trask Building, Suite 102
Wailuku, Hawai'i 96793

40. Gladys Baisa, Acting Director
County of Maui
Department of Water Supply
200 South High Street, 5th Floor
Wailuku, Hawai'i 96793

41. Herman Andaya, Interim Emergency Management Officer
County of Maui
Emergency Management Agency
200 South High Street
Wailuku, Hawai'i 96793

42. Honorable Alika Atay
Maui County Council
200 South High Street
Wailuku, Hawai'i 96793

43. Honorable Michael White, Council Chair
Maui County Council
200 South High Street
Wailuku, Hawai'i 96793

44. Teena Rasmussen
County of Maui
Office of Economic Development
2200 Main Street, Suite 305
Wailuku, Hawai'i 96793

UTILITIES

45. Michael Grider, Manager, Engineering
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawai'i 96733

ORGANIZATIONS

46. Albert Perez, Executive Director
Maui Tomorrow
55 North Chuch Street, Suite A4
Wailuku, Hawai'i 96793

47. Donnie McGean
272 Halenani Drive
Wailuku, Hawai'i 96793

48. Richard "Dick" Mayer
1111 Lower Kimo Drive
Kula, Hawai'i 96790

49. Wallette Garcia Pellegrino
1420 Kilohi Street
Wailuku, Hawai'i 96793

50. Rick Papa, President
Attention: Tiana Raymondo
Kehalani Community Association
P.O. Box 1530
Wailuku, Hawai'i 96793

51. Debbie Cabebe, Chief Executive Officer
Maui Economic Opportunity
99 Mahalani Street
Wailuku, Hawai'i 96793

52. Barbara Kojima
Maui Lani Community Association
P. O. Box 1642
Kahului, Hawai'i 96733-1642

53. **University of Hawai'i at Mānoa**
Environmental Center
2500 Dole Street, Krauss Annex 19
Honolulu, Hawai'i 96822

54. Reid Kawabata
Waikapu Community Association
P.O. Box 3046
Wailuku, Hawai'i 96793

55. Glenn Adolpho
Waikapu Gardens Homeowners Association
P. O. Box 2390
Wailuku, Hawai'i 96793

56. **Wailuku Community Association**
40 Hoauna Street
Wailuku, Hawai'i 96793

57. **Wailuku Heights Extension Unit I Community Association**
P.O. Box 968
Wailuku, Hawai'i 96793

58. Lester Yano
Wailuku Heights Extension Unit II Community Association
c/o Hawaiiana Management Company Ltd.
140 Hoohana Street, Ste 208
Kahului, Hawai'i 96732

59. **FACE MAUI**
Father Terry Watanabe, President
25 Lipoa Street
Kīhei, Hawai'i 96753

60. Jayne Kinoshita
Email: jkskinos@gmail.com

61. Ernest Grace
Email: brahda808@msn.com

62. John and Janice Francis
531 Polulani Drive
Wailuku, Hawai'i 96793

63. Elaine Fujita
Email: gfmaui50@hotmail.com

64. Bob and Debby Takahashi
Email: melemeletakahashi@gmail.com

65. Waiehu Kou Phase 3 Association
c/o Commercial Properties of Maui, Inc.
1962 Wells Street, Suite B
Wailuku, Hawai'i 96793

66. Waiehu Kou Phase 4 Association
655 Kaumualii Street, Suite 1
Wailuku, Hawai'i 96793

67. Maui News
100 Mahalani Street
Wailuku, Hawai'i 96793

EXHIBIT D

EXHIBIT E: SUMMARY OF EXEMPTIONS AND RECOMMENDATIONS

SUMMARY OF EXEMPTIONS AND RECOMMENDED ACTIONS Requested Exemptions					
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption and Estimated Value Where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**	**Recommendation**
1. Requirement for General plan and Community Plan land use consistency	Title 2, Maui County Code, Administration and Personnel	**MCC 2.80B General Plans and Community Plans.** An exemption from Chapter 2.80B, MCC, General Plan and Community Plans, to permit the project to proceed without obtaining a community plan amendment. Section 2.80B.070 sets out the requirements for and establishes the nine (9) community plans for the County. The subject property is designated "Future Growth Reserve" in the Wailuku-Kahului Community Plan Map. The appropriate land use designation for the proposed project is "Multi-Family". As such, an exemption from the requirements for a Community Plan Amendment (CPA) is sought in order to expedite the development of the affordable rental units and meet affordable rental target thresholds. equipment)	Maui County Dept. of Planning expressed no objection to this proposed exemption.	This exemption would expedite the delivery of affordable workforce housing. The current site is designated as "Urban Growth" in the Maui Island Plan.	**Approval.** Related to planning and zoning.
2. Requirement for planting of street trees	Title 12, Maui County Code: Streets, Sidewalks, and Public Places Section 12.24A.070 - Planting of Street Trees Maui County Planting Plan Chapter 2	**MCC 12.24A Landscape Planting and Beautification.** An exemption from the requirements for the required number, species and location of street trees along Honoapi'ilani Highway, Wa'iale Road and Ku'ikahi Drive. Instead, landscaping to be provided in accordance with the Conceptual Landscape Plan prepared by Landscape Architect Russell Y. Gushi. *Refer to attached **Exhibit I-1** – Conceptual Site Plan* Estimated Value: $9,600	Maui County Dept. of Parks and Recreation (DPR) and Dept. of Public Works (DPW). DPR expressed no concerns. DPW noted that trees along the project frontage may pose a maintenance issue.	This exemption would allow the development the flexibility to create an attractive streetscape in a cost-effective manner. It also creates flexibility in location of trees.	**Approval.** Related to planning and zoning.
3. Requirement for payment of wastewater assessment fees	Title 14, Maui County Code: Wastewater Assessment Fees for the Wailuku/Kahulu Wastewater	**MCC 14.35 Wastewater Assessment Fees for Facility Expansion for the Wailuku/Kahului Wastewater Treatment System.** Exemption to allow the project to receive its building permits without the need to pay wastewater assessment fees for the project in its entirety. Although Section 14.35.080 pertaining to Exemptions, exempts County housing projects and facilities from the provisions of this chapter, the project is privately funded with 60% of the units falling within the affordability parameters	Maui County Department of Environmental Management in their September 15, 2017 comment letter stated that the project would not be subject to wastewater assessment fees. However, this exemption has been included to ensure clarification	An exemption from the requirements to pay the wastewater assessment fee for the Wailuku/Kahului Wastewater Treatment System will advance the affordability objectives of the project.	**Approval.** Related to planning and zoning.

EXHIBIT E

SUMMARY OF EXEMPTIONS AND RECOMMENDED ACTIONS (cont'd.)					
Requested Exemptions					
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**	**Recommendation**
	Treatment System	of Chapter 2.96. This exemption clarifies that the applicant is seeking a waiver from the need to pay wastewater assessment fees for the entire 324 units of the project. Estimated Value: $377,460	that wastewater assessment fees are waived.		
4. Requirement for payment of permit and inspection fees	Title 16, Maui County Code: Buildings and Construction Section 16.04C, 16.18B, 16.2B, 16.26B	**MCC Title 16 Building and Construction**. Exemptions from MCC Chapters: • 16.04C, Fire Code, • 16.18B, Electrical Code, • 16.20B, Plumbing Code, and • 16.26B, Building Code, to exempt the project from fire, electrical, plumbing, and building permit, plan review, and inspection fees. Estimated Value: • Fire Code: $61,110 • Electrical Code: $58,816 • Plumbing Code: $100,737 • Building Code: $611,020[1]	Maui County Dept. of Fire & Public Safety and Dept. of Public Works The Dept. of Fire and Public Safety noted that the subject fees are collected as a bundle. Accordingly, Fire Code fees will be exempted if exemptions to electrical, plumbing, and building fees are approved. The Dept. of Public Works had no concerns.	These exemptions provide savings to ensure the project is financially feasible. The project intends to meet all inspection and code requirements.	**Approval.** Related to planning and zoning.

EXHIBIT E

[1] Includes review and permit fee based on $70 million estimated cost to construct the project

EXHIBIT E: SUMMARY OF EXEMPTIONS AND RECOMMENDATIONS

SUMMARY OF EXEMPTIONS AND RECOMMENDED ACTIONS (cont'd.)					
Requested Exemptions					
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**	**Recommendation**
5. Requirements for offsite public street frontage improvements: pavement widening; installing curbs, gutters and sidewalks.	Title 16, Maui County Code: Buildings and Construction Section 16.26B.3600 - Chapter 36: Improvements to Public Streets	**MCC 16.26B Building Code.** Section 16.26B.3600 - Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemption will be sought for construction of curbs and gutters along Ku'ikahi Drive, Wai'ale Road, and Honoapi'ilani Highway. *Refer to attached **Exhibit I-1** - Conceptual Site Plan, **Exhibit I-2** - Proposed Access Improvements, and **Exhibit I-3** - Typical Street Sections* Estimated Value: $1,075,010	Maui County Dept. of Public Works' written comments noted that the Department strongly objects to this exemption request, as sidewalks and bicycle lanes improve mobility, provide additional safety, and are important community assets in this urbanized location. At the all agency meeting DPW stated that it generally does not support this exemption request, but this does not preclude the applicant from seeking the exemption from the County Council.	This exemption will allow the development to avoid the expense of constructing widened pavements, curbs and sidewalks along Ku'ikahi Drive, Wa'iale Road, and Honoapiilani Highway in non-essential locations where such improvements would offer little benefit to project residents. The project intends to install an at-grade sidewalk and bike lane along Wa'iale Road.	**Approval, w/comments noted at end of exemption list.**
6. Requirement for offsite public street frontage improvements: undergrounding overhead utility lines	Title 16, Maui County Code: Buildings and Construction Section 16.26B.3600 - Chapter 36: Improvements to Public Streets	**MCC 16.26B Building Code.** Section 16.26B.3600 Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemptions will be sought to this section pertaining to the undergrounding of overhead utility lines. Estimated Value: $314,200	Maui County Dept. of Public Works commented that the Department generally does not support this exemption request, but stated that this does not preclude the applicant from seeking the exemption from the County Council.	This exemption will enable the development to proceed without the need to pay for the relocation of existing overhead utility lines along Wa'iale Road underground, as this is a non-essential improvement that will not benefit project residents. Only one pole is affected and MECO has no objections.	**Approval, w/comments noted at end of exemption list.**

EXHIBIT E

EXHIBIT E: SUMMARY OF EXEMPTIONS AND RECOMMENDATIONS

SUMMARY OF EXEMPTIONS AND RECOMMENDED ACTIONS (cont'd.)					
Requested Exemptions					
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**	**Recommendation**
7. Requirement for offsite public street frontage improvements: installation of street lights on public streets	Title 16, Maui County Code: Buildings and Construction Section 16.26B.3600 - Chapter 36: Improvements to Public Streets	**MCC 16.26B Building Code.** Section 16.26B.3600 Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemptions will be sought to this section pertaining to street lighting along Ku'ikahi Drive, Wa'iale Road and Honoapiilani Highway. *Refer to attached **Exhibit I-4** – Diagram of On-Site Lighting Locations & Specifications (for Electrical Engineer's Requirement on internal street lights and concept specifications for proposed area lights).* Estimated Value: $84,300	Maui County Dept. of Public Works commented that the Department strongly objects to this exemption request. DPW noted that street lighting will provide a safer walkable environment to nearby local establishments. The Maui Police Department requested consideration for the installation of sufficient lighting for the safety of pedestrians and motorists, and to assist in crime prevention/deterrence.	Developer intends to provide similar lighting conditions that exist adjacent to and along Honoapilani Highway, Ku'ikahi Drive and Wa'iale Road. Improved intersections with lighting occur only at roadway intersections in the immediate community surrounding the Project. The two new project driveways will be lighted from on-site area light poles at the intersection with the public rights-of-way. These area lights will provide lumens similar to the existing adjacent intersections at the ground plane. The public sidewalk proposed between the Project East Entrance and the intersection of Ku'ikahi and Wa'iale Road will also be lighted from on-site area light poles.	**Disapproval.** Related to health and safety.
8. Requirement for payment of park assessment fee	Maui County Code Chapter 18.16.320(I)(5) – Park Assessment Fee	**MCC18.16.320 Parks and Playgrounds.** Pursuant to Section 18.16.320(I)(5), Park Assessment Fees are exempt for workforce housing projects. As sixty percent of the proposed project involves workforce housing units, this portion of the project is exempt from payment of the parks and playgrounds assessment fee. Nevertheless, the proposed project also includes four (4) small parks/playgrounds improvements that vary between 1,200 sq. ft. and 2,000 sq. ft. in size. As such, an exemption for the parks and playground assessment fee will be sought for the market portion of the project (i.e. 40 percent of the total units) since provisions for parks and playgrounds will be provided onsite. Estimated Value: $1,782,000	Maui County Dept. of Parks and Recreation expressed no objection to this request.	This exemption will allow the development to reduce its costs to indirectly subsidize 195 affordable workforce rental units. The area also includes five county parks for residents within a 2-mile radius. The project also includes four children play areas that act as internal parks within the project totaling 16,823sf of area.	**Approval.** Related to planning and zoning.

EXHIBIT E

EXHIBIT E: SUMMARY OF EXEMPTIONS AND RECOMMENDATIONS

SUMMARY OF EXEMPTIONS AND RECOMMENDED ACTIONS (cont'd.) Requested Exemptions					
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**	**Recommendation**
9. Requirement to obtain a change of zoning and community plan amendment	Title 18, Maui County Code Section 18.04.030 and Section 18.16.020	**MCC 18.04 General Provisions and 18.16.020 Compliance.** An exemption from Section 18.04.030, MCC, Administration, and related land use consistency and conformity requirements of Title 18, to exempt the project from obtaining a change in zoning and/or community plan amendment to enable subdivision approval. An exemption from MCC 18.16.020 to exempt the project from General Plan conformity requirements.	Maui County Dept. of Planning Department expressed no concerns or objections.	This exemption would expedite the delivery of affordable workforce housing. The current site is designated as "Urban Growth" in the Maui Island Plan area.	**Approval.** Related to planning and zoning.
10. Requirement for offsite public street frontage improvements: curbs, gutters, sidewalks, and bike connectivity	Title 18, Maui County Code Sections 18.20.040, 18.20.070, 18.20.080	**MCC 18.20 Subdivision Improvements.** Exemption from Sections 18.20.040, 18.20.070 and 18.20.080, MCC, as they relate to the urban standards for curbs, gutters, and sidewalks shall be granted for the portions of the Project adjacent to Wa'iale Road and Ku'ikahi Drive. Instead the project will provide an at-grade sidewalk and bike path along Wa'iale Road and Ku'ikahi Drive with a raised asphalt curb painted white to delineate the pedestrian safety zone. *Refer to attached **Exhibit I-1** - Preliminary Concept Site Plan, **Exhibit I-2** - Proposed Access Improvements and **Exhibit I-3** - Typical Street Sections* Estimated Value: $167,850	Maui County Dept. of Public Works commented that the Department does not support this exemption request, but stated at the all agency meeting that this does not preclude the applicant from seeking the exemption from the County Council.	***Exhibit I-3*** depicts a painted asphalt curb between the main pavement and the pedestrian sidewalk on Wa'iale Road and Ku'ikahi Drive. Note that the actual physical distance between the proposed sidewalk and the outer edge of the southbound vehicle lane on Wa'iale Road will be 9 feet or more, while the distance between the edge of the travel way and sidewalk on Ku'ikahi Drive is 10 feet. These horizontal separation distances provide for pedestrian safety. *Refer to attached **Exhibit I-3** - Typical Street Sections*	**Approval, w/comments noted at end of exemption list.**

EXHIBIT E

EXHIBIT E: SUMMARY OF EXEMPTIONS AND RECOMMENDATIONS

SUMMARY OF EXEMPTIONS AND RECOMMENDED ACTIONS (cont'd.)					
Requested Exemptions					
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**	**Recommendation**
11. Requirement to obtain a change of zoning and to allow the use of the A-2, Apartment District zoning standards	Title 19, Maui County Code: Zoning Section 19.12, Apartment District	**MCC 19.12, Zoning.** An exemption from Chapter 19, MCC, is sought to permit the development and use of the parcel for multi-family residential use, recreational uses and structures, and accessory uses according to the permitted uses, accessory uses and buildings, and development standards of the A-2, Apartment District pursuant to the provisions set forth in Chapter 19.12, Apartment District. In addition, the Applicant is seeking an exemption to the setback requirements of the Apartment District to allow for a utility shed to encroach into the setback along Wai'ale Road.	Maui County Planning Department recommended this exemption in their letter dated May 31, 2018	Enables the project to be developed in accordance with the A-2, Apartment District zoning provisions, except for the utility shed encroachment along Wai'ale Road.	**Approval.** Related to planning and zoning.
12. Requirements of all provisions contained in the Agricultural zoning ordinance.	Title 19, Maui County Code Section 10.30A – Agricultural District	**MCC 19.30A – Agricultural District.** An exemption from MCC 19.30A is sought to exempt the project from all provisions of this chapter.	Maui County Planning Department did not comment on this request, as this exemption was included as a corollary to the Department's recommendation to include the A-2, Apartment District zoning standards.	The A-2, Apartment District zoning standards will apply to the project per Exemption No. 11, as recommended by the Planning Department. However, the underlying zoning will still be "Agricultural". This exemption would clarify that the provisions of 19.30A are not applicable to the project.	**Approval.** Related to planning and zoning.

EXHIBIT E

EXHIBIT E: SUMMARY OF EXEMPTIONS AND RECOMMENDATIONS

SUMMARY OF EXEMPTIONS AND RECOMMENDED ACTIONS (cont'd.)					
Requested Exemptions					
Development Standard or Requirement	Relevant Section/ Requirement	Requested Exemption/ Est. Value where Appropriate	Applicable Agency & Comments	Rationale for Request	Recommendation
13. Requirement to install walls, fences, and landscaping of one (1) shade tree at minimum regular intervals for every five (5) spaces shall be provided within parking areas.	Chapter 19.36A.070. A Maui County Planting Plan, Chapter	**MCC 19.36A, Off-street Parking**. An exemption from Section 19.36A.070 Walls, Fences and Landscaping to allow for the flexibility in the placement of fences and shade trees as set out in the proposed conceptual site plan. *Refer to attached **Exhibit I-1** – Conceptual Site Plan.*	Maui County Dept. of Planning expressed no concerns with this exemption.	The project site is bordered on three sides with streets (Honoapi'ilani Hwy, Ku'ikahi Drive and Wa'iale Road) and is unique to the property by having two front yards. The fourth property boundary abuts an existing Urban District along the southern property boundary. The conceptual landscape plan will enable installation of landscape planting strips along all three roadways and along the southern boundary in accordance with the Conceptual Site Plan (see ***Exhibit I-1***). Flexibility in the spacing of the landscape trees within the project will enhance visual screening of the project from the public street, as well as provide shade. Strict adherence to MCC and the Maui County Planting Plan may not be possible.	**Approval.** Related to construction standards for development of land.
14. Requirements for processing of a DBA request	Section 19.68.10 Purpose; Section 19.68.020 Applications, Section 19.68.030 Procedures; Section 19.510 Application	**MCC 19.68 State Land Use District Boundaries; MCC 19.510 Application and Procedures; County of Maui Charter, Chapter 8, Department of Planning.** Each of the foregoing provisions of the MCC and County Charter sets forth specific procedures for the processing of a State District Boundary Amendment (DBA) for parcels having a land area of 15-acres or less. The Applicant is seeking exemptions from the foregoing provisions of the MCC and County Charter to enable the DBA request to proceed directly to the Maui County Council. Accordingly, the DBA request will not require the preparation of a DBA application as required by code, and will not require processing through the Maui Planning Commission. Instead, review and comment on the DBA request is being	Maui Planning Department expressed no objections with the proposed exemptions.	The exemptions will expedite the processing of the DBA request by allowing the request to proceed directly to the Maui County Council for review and approval by ordinance. The intent of the exemptions is to expedite the processing of the DBA by removing the requirements for application documentation, noticing, Maui Planning Commission hearing and related	**Approval.** Related to planning and zoning.

EXHIBIT E

	and Procedures; County Charter Chapter 8, Department of Planning.	addressed through the Chapter 343, HRS process and the Section 201H process.		procedural matters which would otherwise delay the processing of the DBA. The Chapter 343, HRS and Section 201H processes provide an opportunity for public and agency review of the proposed action. The County Council will conduct its review and decision-making of the project through its standard process which will also provide for public and agency input.	
Comments for exemption no's. 5, 6 and 10: The widened pavements, curbs, sidewalks and bike lanes are amenities which benefit project residents and the larger community. The requested exemption no's. 5 and 10, which allow for at-grade sidewalks with a raised asphalt curb and gutter that are similar to the neighboring Waiale Affordable Housing and Waikapu Gardens projects, will result in cost savings of approximately $1,242,860. Also, exemption no. 6 which would enable the Developer to avoid undergrounding of overhead utility lines would have cost savings of approximately $314,200. The financial impact to the rental project must be weighed against the character of off-site street frontage improvements for the community that are established by the County.					

EXHIBIT E-1



PRELIMINARY PLANT LIST:

1. LARGE SHADE TREES: (35' Canopy or Larger)
   - e.g.: Kukui, Kamani, Koa
2. MEDIUM-SIZED SHADE TREES: (25' Canopy Max.)
   - e.g.: Kou, Manele, Hō'awa
3. SMALL TREES: (15' Canopy Max.)
   - e.g.: 'Ohi'a, Hala, Koa'e, Alahe'e
4. LARGE SPECIMEN SHADE TREE:
   - e.g.: Monkeypod (Existing Onsite tree to be relocated)
5. SINGLE-TRUNKED PALMS:
   - e.g.: Coconut, Loulu
6. MULTI-TRUNKED PALMS:
   - e.g.: Areca, MacArthur
7. SHRUBS:
   - e.g.: 'Ā'ali'i, Anapanapa, Blue Vireo, Hame, Kolokolo Kahakalo, 'Ulei, Beach Naupaka, Pōhuhu, Mala, Mo'o Hau Hele, Ruknl
8. GROUND COVERS:
   - e.g.: 'Ilima papa, Niahi, Nupukupu Fern, Pili Grass, Pohinahina, Naio Papa, 'Ūlei
9. GRASSES:
   - e.g.: Hybrid Bermuda, El Toro Zoysia

RUSSEL Y. GUSHI
ASLA
LANDSCAPE ARCHITECT
P.O. BOX 2291
WAILUKU, MAUI, HAWAII 96793
TEL (808) 250-0525
e-mail: gushi@maui.net

LICENSE EXPIRES APRIL 30, 2018

WAILUKU WORKFORCE APARTMENTS
TMK: (2) 3-5-001:004
EAST KUIKAHI DRIVE & WAIALE ROAD
WAILUKU, MAUI, HAWAII

PRELIMINARY LANDSCAPE PLAN

NO	DATE	REVISION	BY

TITLE: PRELIMINARY LANDSCAPE PLAN

PROJECT NO. 16-06
DATE: JULY, 2017
DRAWING NO. LP-1
SHEET OF

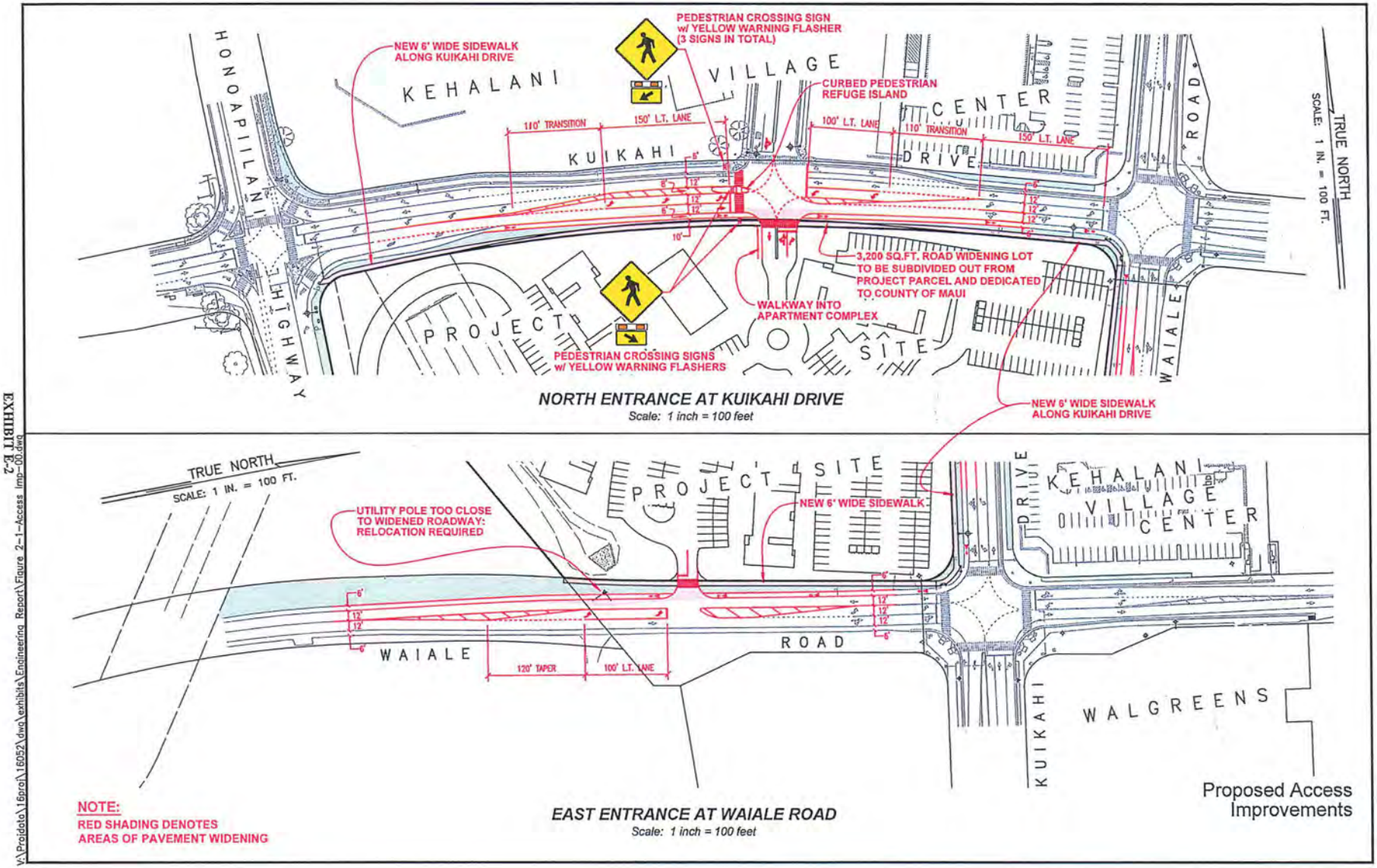
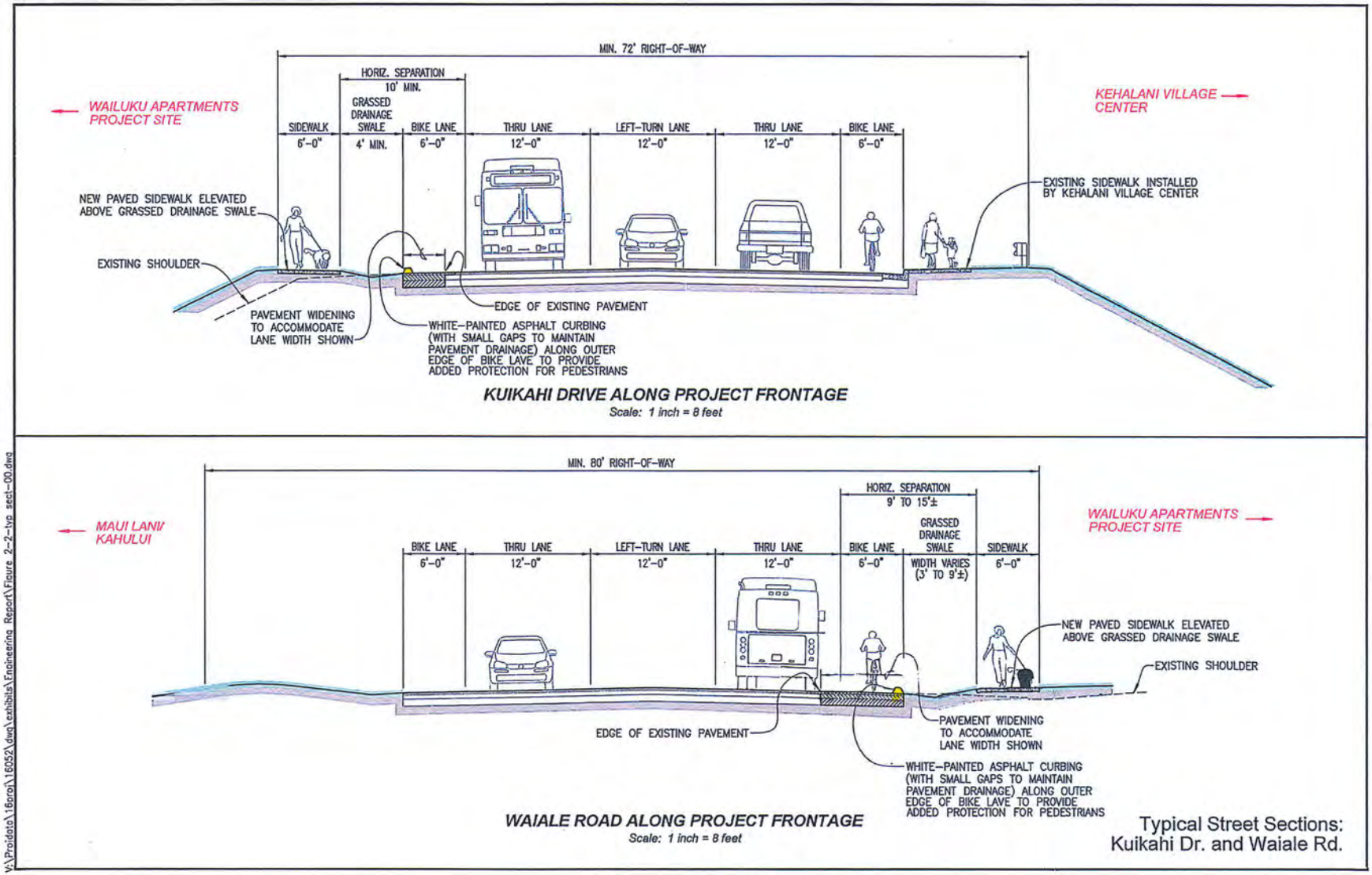


EXHIBIT E-2

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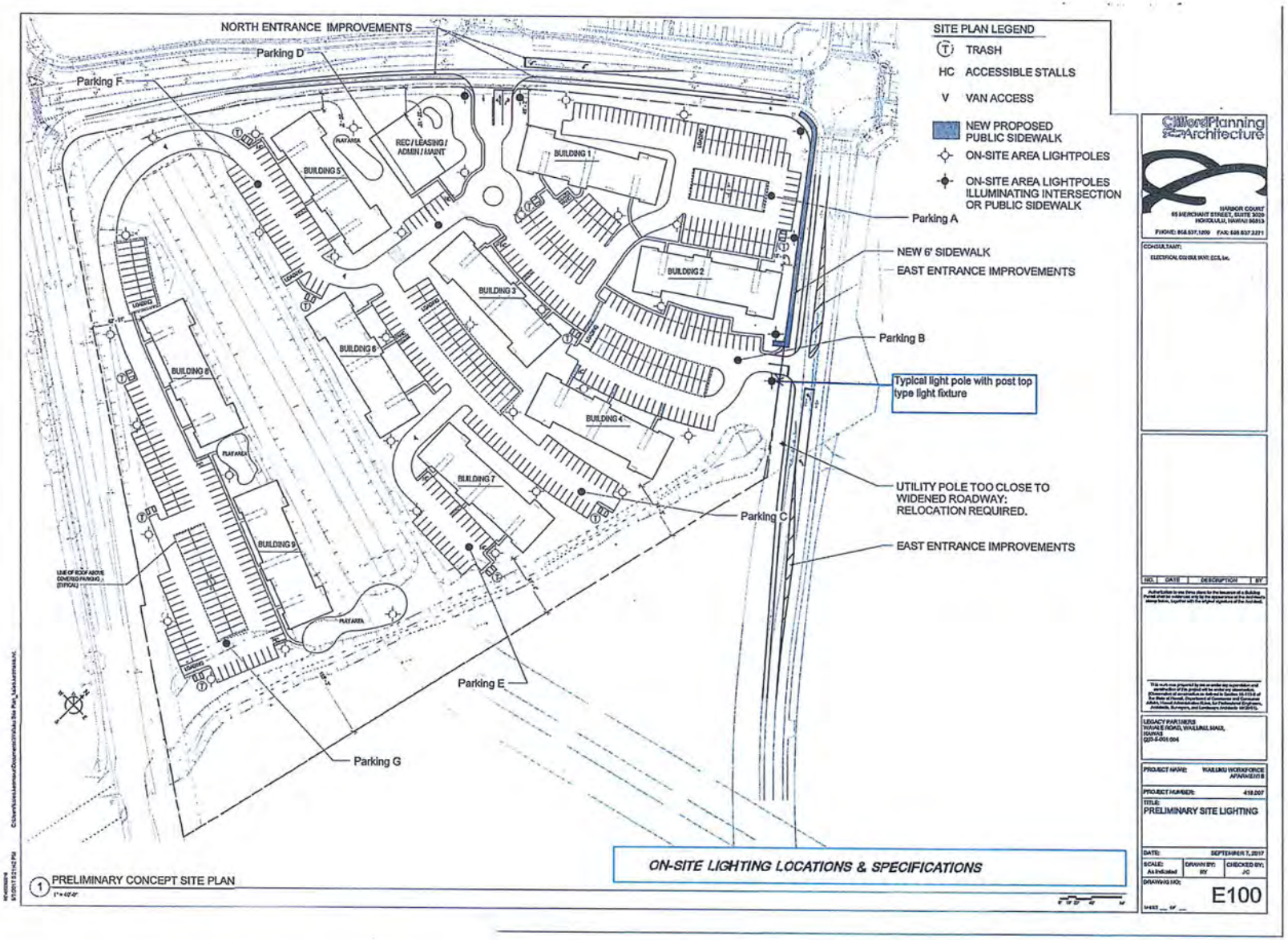


Typical Street Sections:
Kuikahi Dr. and Waiale Rd.

EXHIBIT E-3

V:\Proldata\16oral\16052\dwg\exhibits\Engineering Report\Figure 2-2-typ sect-00.dwg

EXHIBIT E-4


NORTH ENTRANCE IMPROVEMENTS
Parking D
Parking F
REC / LEASING / ADMIN / MAINT
BUILDING 1
BUILDING 2
BUILDING 3
BUILDING 4
BUILDING 5
BUILDING 6
BUILDING 7
BUILDING 8
BUILDING 9
PLAY AREA
LOADING
Parking A
NEW 6' SIDEWALK
EAST ENTRANCE IMPROVEMENTS
Parking B
Typical light pole with post top type light fixture
UTILITY POLE TOO CLOSE TO WIDENED ROADWAY: RELOCATION REQUIRED.
Parking C
EAST ENTRANCE IMPROVEMENTS
Parking E
Parking G
LINE OF ROOF ABOVE COVERED PARKING (TYPICAL)
SITE PLAN LEGEND
TRASH
HC ACCESSIBLE STALLS
V VAN ACCESS
NEW PROPOSED PUBLIC SIDEWALK
ON-SITE AREA LIGHTPOLES
ON-SITE AREA LIGHTPOLES ILLUMINATING INTERSECTION OR PUBLIC SIDEWALK
ON-SITE LIGHTING LOCATIONS & SPECIFICATIONS
1 PRELIMINARY CONCEPT SITE PLAN
Hallstrom Group Inc. Planning Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271
CONSULTANT:
ELECTRICAL CONSULTANT: ECS, Inc.
NO. DATE DESCRIPTION BY
LEGACY PARTNERS
KUALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-2-001:004
PROJECT NAME: WAILUKU WORKFORCE APARTMENTS
PROJECT NUMBER: 419.007
TITLE:
PRELIMINARY SITE LIGHTING
DATE: SEPTEMBER 7, 2017
SCALE: As Indicated
DRAWN BY: BY
CHECKED BY: JC
DRAWING NO:
E100

Wailuku Workforce Apartments All-Agency Meeting Agenda
May 15, 2018, 3:00pm-5:00pm
Mayor's Remarks

Project Overview & Schedule

• All-agency (state and county) meeting	May 15, 2018
• HHFDC Board Meeting	To be determined: July or August 2018
• Submit 201H and DBA to Maui County Council Land Use Committee	September 19, 2018
• Land Use Committee Hearing for 201H (1st meeting)	October 3, 2018
• Council Meeting: DBA Schedule (on Full Council Agenda) Refer to Committee	October 5, 2018
• Land Use Committee Hearing for 201H (2nd reading) and DBA Recommendation	October 17, 2018
• Full Council Approval for 201H and First Hearing for DBA	November 2, 2018
• Full Council Approval for DBA (2nd and final reading) by Ordinance	November 16, 2018

EXHIBIT F

Quick Introductions (Name Tags)

1. Mayor Alan Arakawa
2. Gladys Baisa and Wendy Taomoto, Department of Water Supply
3. Will Spence and Tara Furukawa, Planning Department
4. Carol Reimann, Office of Housing and Human Concerns
5. Mike Miyamoto, Department of Environmental Management
6. Rowena Dagdag-Andaya (or Nolly Yagin), Department of Public Works
7. Oliver Vaas, Fire Department
8. Robert Halverson, Department of Parks & Recreation
9. Ken Takahashi, Hawaii Housing & Finance Development Corporation
10. Genoa Ward, Hawaii Housing & Finance Development Corporation
11. Kerry Nicholson, Legacy Wailuku LLC
12. Charles Wathen, Legacy Wailuku LLC
13. Linda Schatz, Legacy Wailuku LLC (Recording Notes)
14. Vince Bagoyo, Bagoyo Development LLC
15. Michael Munekiyo, Munekiyo & Hiraga
16. Erin Mukai, Munekiyo & Hiraga (Recording Notes)
17. Darren Unemori, Warren S. Unemori
18. Tyler Fujiwara, Austin Tsutsumi & Associations
19. Ben Lee and Mayra Ruiz, Clifford Architecture & Planning

Review Exemptions List (see page 2)

Wailuku Workforce Apartments All-Agency Meeting Agenda
May 15, 2018, 3:00pm-5:00pm
Next Steps

1. MCC 2.808 General Plans and Community Plans. Section 2.808.070 sets out the requirements for and establishes the nine (9) community plans for the County. The subject property is designated "Future Growth Reserve" in the Wailuku Kahului Community Plan Map. The appropriate land use designation for the proposed project is "Multi-Family". As such, an exemption from the requirements for a Community Plan Amendment (CPA) will be sought in order to expedite the development of the affordable rental units and meet affordable rental target thresholds.

Department of Planning	
W. Spence noted that the Planning Department has no objections.	

2. MCC 12.24A Landscape Planting and Beautification. An exemption from the requirement to allow landscaping to be provided in accordance with the Conceptual Landscape Plan prepared by Landscape Architect Russell Y. Gushi. Refer to **Figure 3.**

EXHIBIT F

Mayor Arakawa	Department of Planning (DPL)	Department of Public Works (DPW)	Department of Parks and Recreation (DPR)
Mayor Arakawa noted the importance of having the appropriate trees/plantings for the project and area. He cautioned that roots of monkeypod trees uplift roads and pavement and that their seed pods, which fall to the ground, can cause a maintenance issue. He highlighted the opportunity to plant trees in planters in order to restrict their roots from causing any kind of disturbance. He also asked to consider how well trees house birds as bird droppings can have a negative effect.	*W. Spence noted the Department's willingness to work with the team on its planting list.*	*R. Dagdag-Andaya noted that the Department's main concern are the trees along the project frontage as they become a maintenance issue. She noted that the Department will be bringing an arborist on staff.*	*R. Halverson noted that DPR had no objections.*

3. MCC 14.01 General Provisions. An exemption from the 14.01.040 Definitions pertaining to "subdivision", which is defined in part as, *"the construction of a building or group of buildings, other than a hotel, on a single lot, parcel, or site which will contain, result, or be divided into four or more dwelling units, including planned developments pursuant to Chapter 19.32 of this code, condominium projects*

established pursuant to Hawaii Revised Statutes, or other forms of development, provided, that unless requested by the developer, condominium projects shall not be required to install separate water meters for each condominium unit. The exemption will be sought to exempt the project from subdivision offsite water system improvements over and beyond those specified in the Preliminary Engineering Report (PER). Refer to **Appendix "8".**

Department of Water Supply (DWS)	
W. Taomoto noted that the Department would not be able to support the exemption as it is health and safety issue. She noted that the requirement is not applicable to the project; therefore, there shouldn't be an exemption.	

4. MCC 14.05 Subdivision Water System Requirements. Section 14.05.090 Fire Protection requires spacing of fire hydrants along streets shall be not more than 250 feet apart in apartment districts. An exemption will be requested to delete the requirements relating to the installation of offsite water system infrastructure improvements along the street frontages that may not be appropriate for the proposed project since an onsite fire protection system is proposed as specified in the PER. Nevertheless, the Applicant will coordinate with the Department of Water Supply, to ensure that all health and safety requirements will be met by the project infrastructure improvements through installation of the onsite fire protection system.

EXHIBIT F

Department of Water Supply (DWS)	
W. Taomoto noted that the Department would not be able to support the exemption as it is health and safety issue. She discussed potential DWS requirements along Waiale Road, including the possible need for two fire hydrants. She asked the team to work with DWS and to submit a letter with plans to DWS.	

5. MCC 14.07 Water System Development Fees. Section 14.07.050(A) establishes a water system development fee for applicants granted a water service. Since a major portion of the project involves affordable rental units an exemption will be requested from this section for the whole project to reduce costs which will help meet the affordable unit thresholds.

Department of Water Supply (DWS)	
W. Taomoto noted that DWS would not be able to support the exemption because DWS fees cannot be exempted. She added that credits may be used in lieu of fees.	

6. MCC 14.12 Water Availability. Section 19.12.020 Applicability and Scope requires all subdivisions to verify long-term reliable supply of water before applicable subdivisions are approved. Exemptions to this chapter include Residential Workforce housing units. Since 60 percent of the proposed project involves units eligible for the workforce housing exemption, this portion of the project

will not need to verify long-term reliable supply of water. However, since 40 percent of the units will be at market rental prices, an exemption from this section of the code will be made to cover the market portion of the project.

Department of Water Supply (DWS)	DWS Follow-Up After May 15th Meeting
W. Taomoto noted the need for the letter to DWS to include demand for the swimming pool. She noted that the exemption would not be needed because the project will be able to meet the requirements of Maui County Code, 14.12 for the market units pursuant to Title 16, Chapter 201 of the Department's Administrative Rules..	*W. Taomoto noted the exemption is not required for the following reasons:* a. *Per Title 16, Chapter 201 of the Department's administrative rules, the project falls within the following definition of "large quantities of water In a department potable water system where the estimated three year forecast for water usage is below 88 percent of the department's maximum reliable capacity, an applicant's request for water service from the department for new or additional uses is* ***more than 120,000 gallons per day****.* b. *The 40% of the project's total water demand (market complonent), plus the demand of the project's swimming pool appears to be significantly below the 120,000 gpd threshold. Accordingly, water should be available for the project. The word "should" is used here because the DWS cannot guarantee that the Central Maui Water System will continue to fall within the catergory of below 88 percent of the Department's maximum reliable capacity in the future.* *W. Taomoto suggested that a letter be submitted to DWS describing the water demand for the 40% market component plus the swimming pool demand, and to seek confirmation of water availability pursuant to Title 16, Section 201. This letter would be submitted at the time of requesting a water reservation. By virtue of receiving a water reservation, the project would then satisfy MCC 14.12.* *She cautioned that although a water reservation may be granted, the meter will not be approved for installation until all easement limitations have been cleared.*

EXHIBIT F

7. MCC Title 16 Building and Construction. An exemption from Chapter 16.048, MCC, Fire Code, 16.188, Electrical Code, 16.20A, Plumbing Code, and 16.26, Building Code, will be sought to exempt the project from fire, electrical, plumbing and building permit fees, as well as plan review and inspection fees.

Department of Public Works (DPW)	Fire Department
R. Dagdag-Andaya noted that the DPW has no concerns.	*O. Vaas noted that he would need to check internally with his Department on this exemption request.*

8. MCC 16.04C Fire Code. Section 16.04C.010 incorporates the State Fire Code which requires onsite truck turnarounds in parking areas over 300 feet in length. An exemption from this section of the Fire Code will be requested to allow the development to construct parking areas with dead-ends up to 300 feet long without a fire truck turnaround when safety is not compromised. The Applicant will coordinate the onsite fire protection system with the Department of Water Supply and Department of Fire and Public Safety to ensure that onsite fire hydrants are located within an appropriate distance from each structure on the site to provide fire protection.

EXHIBIT F

Fire Department	
O. Vaas noted that the Department would not be able to support this particular exemption, but explained that some of the project's internal roads may be considered a turnaround and the exemption request may not be needed. He further explained that the Department has found ways to work with applicants on various projects such that this provision of the code has never held up a project. He recommended that the team submit the project plans to the Department for review.	

9. MCC 16.26B Building Code. Section 16.268.3600 Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemptions will be sought to this section pertaining to the undergrounding of overhead utility lines; construction of curbs and gutters along Ku'ikahi Drive, Wai'ale Road, and Honoapi'ilani Highway; sidewalk and bike lane installation along Honoapi'ilani Highway; and paving sidewalks using asphalt instead of concrete. The project will install sidewalks, bike lanes, and pedestrian crossing improvements at those locations on Wai'ale Road and Ku'ikahi Drive as represented in the PER and which have been deemed essential by the Maui County Department of Public Works for public welfare and safety. Refer to **Figure 14** and **Appendix "B".**

Department of Public Works (DPW)	

R. Dagdag-Andaya explained that generally, DPW does not support these exemption requests, but noted that it does not necessarily preclude an applicant from seeking the exemption through the County Council. She further noted that the Department would like to work with the team regarding compliance and suggested a meeting with staff to go over details.	

10. MCC18.16.320 Parks and Playgrounds. Pursuant to Section 18.16.320(1)(5) Park Assessment Fees are exempt for workforce housing projects. As sixty percent of the proposed project involves workforce housing units, this section of the MCC will exempt this portion of the project from the parks and playgrounds assessment fee. Nevertheless, the proposed project also includes four (4) small parks/playgrounds improvements that vary between 1 ,200 sq. ft. and 2,000 sq. ft. in size. As such, an exemption for the parks and playground assessment fee will be sought for the market portion of the project (i.e. 40 percent of the total units) since provisions for parks and playgrounds will be provided onsite.

Department of Parks & Recreation			
R. Halverson noted no concerns.			

EXHIBIT F

11. MCC 18.04 General Provisions and 18.16.020 Compliance. An exemption from Section 18.04.030, MCC, Administration, and related land use consistency and conformity requirements of Title 18, shall be granted to exempt the project from obtaining a change in zoning and/or community plan amendment to enable subdivision approval. An exemption from MCC 18.16.020 shall be granted to exempt the project from General Plan conformity requirements.

Department of Planning			
W. Spence noted no concerns or objections.			

12. MCC 18.20 Subdivision Improvements. An exemption from subdivision improvement requirements pursuant to Sections 18.20.040, 18.20.070, 18.20.080 as they relate to the urban standards for curbs, gutters and sidewalks for portions of the proposed project adjacent to Ku'ikahi Drive and Wai'ale Road will be sought (see Exemption No. 9, above). Exemption to this Chapter includes an exemption from Council Resolution 12-34 County "Complete Streets Policy" to allow bicycle and pedestrian improvements as reflected in the PER. Refer to **Figure 14** and **Appendix "B".**

Department of Public Works (DPW)	

R. Dagdag-Andaya suggested removing the exemption as the complete streets policy does not apply to the project.	

13. MCC 18.20.135 Post-construction Stormwater Quality Best Management Practices. This exemption will be sought to allow onsite drainage improvements as represented in the PER to handle post-construction stormwater quality best management practices. Refer to **Appendix "B".**

Exemption to be deleted	

14. MCC 19.30A Agricultural District. Permitted uses in the Agricultural District does not include apartments nor multi-family residences. As such the project will seek exemptions from MCC 19.30A.050, Permitted Uses, to allow for multi-family residential use, recreational uses and structures and accessory uses; as well as exemptions from MCC 19.30A.030., District Standards, to allow the following Development Standards:

Maximum Building Lot Coverage: 11 percent
Maximum Building Height: 40 feet from finished grade, except that vent pipes, fans, elevators, and stairway shafts, chimneys, cell or antennae, and equipment used for small scale energy systems on roofs shall not exceed 10 feet above the maximum building height or structure, whichever is less.
Yard Setback: Front and side yard setbacks of 15 feet for buildings up to 35 feet in height and 20 feet for portions of buildings over 35 feet in height.

The project will, in addition, seek an exemption from MCC 19.30A.100 to eliminate compliance with Subdivision Agreement (Agricultural Use) dated January 26, 1995 recorded in the Bureau of Conveyances, State of Hawai'i (Document No. 95- 019375) and Agreement for Allocation of Future Subdivision Potential dated November 3, 2004 recorded in the Bureau of Conveyances, State of Hawai'I (Document No. 2004-227693).

Department of Planning	
The Department stated the exemption from Maui County Code, 19.30A should be replaced with an exemption to allow the standards of the A-2, Apartment District to apply. B. Lee clarified that a utility shed encroaches into the setback and that a specific setback exemption for this condition will need to be addressed. The Department did not note any concerns with the exemption related to the subdivision agreement. *It was agreed that the exemption request would be rewritten to cover the utility shed.*	

EXHIBIT F

15. MCC 19.36A, Off-street Parking. Section 19.36A.070 Walls, Fences and Landscaping, requires that one (1) shade tree at minimum regular intervals for every five (5) spaces shall be provided within parking areas. An exemption will be requested from this section to allow for the flexibility in the placement of shade trees as set out in the proposed site plan. Refer to **Figure** 3. This will allow arrangement of the trees to be varied in order to provide more effective parking lot screening from the public streets while continuing to provide adequate shade.

Department of Planning	
W. Spence noted that the Department has no concerns.	

16. MCC 19.68 State Land Use District Boundaries. Section 19.68.030 Procedures, requires the State District Boundary Amendment (DBA) application to undergo a process involving notification, public hearing, and review by the Maui Planning Commission, upon which a recommendation is forwarded to the Maui County Council for action. The Applicant is seeking an exemption from this section of the code to expedite the processing of the DBA application by not having the application reviewed by the Maui Planning Commission. In support of this exemption, the Applicant notes public and agency review of the application will be carried out during review of the Environmental Assessment (EA) document pursuant to Hawai'i Revised Statutes, Chapter 343. The Maui Department of Planning provided comments on the proposed project during the preparation of the Draft EA. The Applicant, in its response letter to the Department of Planning, addressed all comments. Accordingly, the Applicant is seeking an exemption to this section in order to facilitate the processing of the DBA application directly to Council.

EXHIBIT F

Department of Planning	
W. Spence suggested that the Applicant consider an exemption from Maui County Code, Chapter 19.510, Application and Procedures, as well an exemption from the County Charter, as related to this request.	

17. Maui County Department of Water Supply Water Dual System Policy. The project will seek an exemption from this policy to allow the project to provide both drinking water and fire protection from the same onsite water main. With the exception of the foregoing exemptions, the project shall conform to Maui County Code and County of Maui Administrative Rules and Regulations in effect at the time of the granting of the Section 201 H-38 Application. Amendments to the Maui County Code and Administrative Rules and Regulations adopted subsequent to the granting of the Section 201 H-38 approval shall not apply to the project.

Department of Water Supply	
W. Taomoto noted that the DWS policy is not applicable to the project. Therefore, an exemption would not be needed.	

18. With the exception of the foregoing exemptions, the project shall conform to Maui County Code and County of Maui Administrative Rules and Regulations in effect at the time of the granting of the Section 201 H-38 Application. Amendments to the Maui County Code and Administrative Rules and Regulations adopted subsequent to the granting of the Section 201 H-38 approval shall not apply to the project.

Hawaii Housing Finance & Development Corporation	
K. Takahashi has checked with HHFDC management and staff and find that 201H cannot be used to exempt from future requirements. This exemption will be deleted.	

EXHIBIT F

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

November 8, 2017

Mr. Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: COMMENTS ON DISTRICT BOUNDARY AMENDMENT (DBA) PROCESSING AND PROCEDURAL ISSUES FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT, WAILUKU, ISLAND OF MAUI, HAWAII; TMK: (2) 3-5-001:064 (RFC 2017/0096)

The Department of Planning (Department) is in receipt of a question regarding procedural matters for the processing of a District Boundary Amendment for the Wailuku Apartment Rental Housing Project located on approximately 14.416 acres. The Department has no objection with the Applicant proceeding directly to the Maui County Council for review of this 201H Project District Boundary Application, and seeking an exemption from the procedural processing requirements of a District Boundary Amendment Application under 15 acres.

Thank you for the opportunity to comment. Should you require further clarification, please contact Staff Planners Kurt Wollenhaupt by email at kurt.wollenhaupt@mauicounty.gov or Tara Furukawa by email at tara.furukawa@mauicounty.gov or by phone at (808) 270-8205.

Sincerely,

for WILLIAM SPENCE
Planning Director

xc: Michele Chouteau McLean, Deputy Director (PDF)
Clayton I. Yoshida, Planning Program Administrator (PDF)
John S. Rapacz, Planning Program Administrator (PDF)
Tara K. Furukawa, Staff Planner (PDF)
Kurt F. Wollenhaupt, Staff Planner (PDF)
Vince Bagoyo (PDF)
Project File
General File

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MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

William Spence, Director
Department of Planning
County of Maui
One Main Plaza
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Spence:

Thank you for your letter dated February 16, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we acknowledge receipt of your previous letters dated November 3, 2017 and November 8, 2017 responding to the Draft EA published in the September 23, 2017 Environmental Notice. Although this Draft EA has been withdrawn please be advised that your comments will be included and addressed in the new Draft EA.

We also acknowledge that your Department does not object to the Section 201H-38 application proceeding directly to the Maui County Council for a State District Boundary Amendment under 15 acres.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 • Honolulu, Hawaii 96813 • Tel: 808.983.1233
www.munekiyohiraga.com

EXHIBIT G

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. Copies of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
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ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

GLEN A. UENO, P.E., P.L.S.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

JOHN R. SMITH, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

November 9, 2017

Mr. Vince Bagoyo
BAGOYO DEVELOPMENT CONSULTING GROUP
1500 Kilinoe Place
Wailuku, Maui, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT AND ANTICIPATED FINDINGS OF NO SIGNIFICANT IMPACT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT TMK: (2) 3-5-001:064, WAIALE ROAD, WAILUKU, MAUI, HAWAII

We reviewed the subject application and have the following comments:

Comments from the Highways Division:

1. Page 81, Summary of Exemptions, No. 9 –Vertical concrete curb/gutter and sidewalks will provide a safer, longer term walkable environment to nearby local establishments. We do not recommend the requested exemption for asphalt curb and sidewalk, and grassed swale along Waiale Drive, and no sidewalk along Kuikahi Drive (Figure 2-2). Onsite sidewalk plan does not appear to provide residents a directed route avoiding Kuikahi Drive shoulder (page 97). Drainage improvements along Kuikahi Drive and Waiale Road frontages should be considered similar to the improvements currently being constructed across the street along Kuikahi Drive.

2. Page 82, Summary of Exemptions, No. 11 – Street lighting will provide a safer walkable environment to nearby local establishments. We do not recommend the requested exemptions from street lighting.

3. Page 84, Summary of Exemptions, No. 12 – Non-conformance with the County's Municipal Separate Storm Sewer System (MS4) guidelines may

put the County at risk of non-compliance. We do not recommend the requested exemption to push compliance onto downstream facilities.

4. Page 86, Summary of Exemptions, No. 17 – See comments on exemption No. 9 above.

Comments from the Engineering Division:

1. Page 78, Summary of Exemptions, No. 3 - The Department is unsure of the exemption being requested from Title 12, Maui County Code: Street, Sidewalks, and Public Places. Please identify the specific section in this title that the applicant is requesting an exemption from.

2. Page 78, Summary of Exemptions, No. 3 - Provide a breakdown of the estimated $1,075,010 value on offsite bike and pedestrian connectivity.

3. Page 78, Summary of Exemptions, No. 3 - The rationale for Exemption B.3 also notes a ". . . bike lane for pedestrians . . .", this needs to be revised for clarity.

4. Page 78, Summary of Exemptions, No. 3 - The project entry is located directly across the Kehalani Village Center which creates an opportunity for connectivity between the two areas. Limiting pedestrian crossings to the signalized intersections at Kuikahi Drive and Honoapiilani Highway and Kuikahi Drive and Waiale Road is unrealistic and potentially creates an unsafe situation for pedestrians wanting to cross the road at the project's entry location. The Department requests that the applicant consider solutions for a pedestrian crossing with appropriate safety improvements and that this crossing be installed to the satisfaction of the Department of Public Works.

5. Page 81, Summary of Exemptions, No. 9 – The applicant requests an exemption to Title 16, Maui County Code, Buildings and Construction, Section 16.26B.3600-Chapter 36: Improvements to Public Streets and states the following as rationale:

> "Exempt the development from having to construct pavements, curbs, and sidewalks along Kuikahi Drive, Waiale Road, and Honoapiilani Highway when doing so will offer little or no benefit to project residents but whose cost will add significantly to their rents."

Consider the transportation needs of residents who do not have access to a car. Is it implied that ***all*** of your residents will have a car? For families without a car, walking, biking, or public transportation may be their only options for mobility.

Children living in the area may attend Pu'u Kukui Elementary School, Iao Intermediate School or St. Anthony School. Bus service may not be an option for these children, so walking to school may be the only transportation option made available to them.

Sidewalks and bike lanes are Complete Street elements that improve mobility, provide additional safety, and promote geographic equity for residents. These elements are important community assets in this urbanized location, especially for children, seniors, and individuals with disabilities. As such, the Department strongly objects to the requested exemption.

6. The Traffic Impact Analysis report (TIAR) states that no bike improvement is identified along Waiale Road in the Hawaii Department of Transportation (HDOT) Bike Plan Hawaii. This should not be taken to mean that bicycle-related improvements do not need to be included with the project. Due to the affordable component of this project, improvements for non-motorized means of transportation such as bicycles should be provided.

7. Exemptions to pedestrian- and bicycle-related improvements are contrary to the County of Maui's efforts toward Smart Growth and the use of Complete Streets design methods.

8. Cost for exemption B.9. is included in cost presented for B.3. Provide a breakdown as curbs, gutters, and some pavement widening may need to be treated separate from B.3. (Offsite Pedestrian and Bike Connectivity) to present a better cost of the improvements.

9. TIAR provides a brief discussion on Transportation Demand Management (TDM) programs, however, project does not identify improvements for safely getting future residents to those services.

10. TIAR lists with project recommendations. The project narrative should clearly state which entity is responsible for the improvements.

11. Provide recommendations to improve traffic circulation within the TIAR study area. Report identifies existing concerns within the TIAR study area and the proposed project adds to the existing concerns. Provide an overview of recommendations that may improve traffic circulation within the TIAR study area.

12. TIAR recommends optimizing the Waiale Road/Kuikahi Drive intersection signal. Optimization should be done over a period of time. TIAR should propose a schedule to provide the optimized phasing and timing.

13. TIAR recommends providing a left turn with a minimum storage length of "at least 50 feet or as long as feasibly possible . . . ." What is actually required to serve the development, and what are the effects if the project does not provide the required length? Discussion on alternative project access points and configuration should be provided.

14. TIAR recommends providing a new northbound left turn lane with a minimum of at least 50 feet. Please confirm that 50 feet is the length required.

15. TIAR recommends restriping the southbound leg of the Kuikahi Drive Project Access. How does this impact overall intersection operations and who will implement this?

16. TIAR Figure 1.1 - Include study of Waiale Road/Kaupo Street, Waiale Road/Olomea Street, and Waiale Road/Kaohu Street intersections, or provide justification for not including them.

17. TIAR pg. 18, 25, 32-34 - Provide justification and calculations showing Level of Service (LOS) E/F during the AM and PM Peak Hours for the roundabout at Maui Lani Parkway/Kamehameha Avenue. The Department's most recent analysis of this intersection shows a single-lane roundabout operating at a LOS C (worst approach) in 2036 with similar volumes.

18. The Engineering Division recommends that the applicant schedule a meeting with the Department to discuss the Division's concerns with the proposed exemptions and proposed traffic mitigation.

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:da
xc: Highways Division
Engineering Division
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EXHIBIT G

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

David Goode, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK(2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Goode:

Thank you for your letter, dated February 22, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing project. On behalf of Legacy Wailuku, LLC, we acknowledge you have no additional comments and note your referral to your previous comment letter dated November 9, 2017.

In response to your previous comments regarding the proposed exemptions requested, the applicant is currently re-evaluating the list of proposed exemptions. Where possible the project will comply with the County's requirements. Your comments relating to the Traffic Impact Analysis Report (TIAR) has been forwarded to the traffic consultant. An updated TIAR is being prepared and will be included in the Draft EA. The engineering and traffic consultants will be contacting your Engineering Division.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 • Honolulu, Hawaii 96813 • Tel: 808.983.1233
www.munekiyohiraga.com

EXHIBIT G

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:tn
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
Tyler Fujiwara, Austin Tsutsumi & Associates, Inc.
Darren Unemori, Warren S. Unemori Engineering, Inc.
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MAY 21 2018

PHONE (808) 594-1888 FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
560 N. NIMITZ HWY., SUITE 200
HONOLULU, HAWAI'I 96817

HRD 18-8305D

May 10, 2018

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Re: Comments on Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project
Wailuku Ahupua'a, Pū'ali Moku, Maui Mokupuni
Tax Map Keys: (2) 3-5-001: 064

Aloha e Ms. Suyama:

The Office of Hawaiian Affairs (OHA) received your letter and a compact disc containing a copy of the Draft Environmental Assessment (DEA) for the Proposed Wailuku Apartment Rental Housing Project. The applicant, Legacy Wailuku, LLC, is proposing to develop 324 rental units, which will consist of 195 affordable units and 129 market rate units. The applicant is seeking project implementation through Hawai'i Revised Statutes (HRS) § 201H-38, which provides eligible housing developments exemptions from statutes, ordinances, charter provisions, and rules related to planning, zoning construction standards for subdivisions, and development and improvement of land. This EA was prepared to support the applicant's 201H-38 application.

OHA submitted comments in a letter dated October 25, 2017 for a DEA for this project that was published in September 2017, which was subsequently withdrawn in February 2018. OHA's letter is included in this current DEA as an appendix. OHA maintains our same concerns regarding affordable housing and impacts to cultural resources that we expressed in our October 2017 letter and we reiterate them below.

Throughout the DEA, the proposed action is described as consisting of 60 percent affordable rental apartment units that will be priced to qualified individuals earning within the 80% to 140% of Maui area median income (AMI). Page 8, however, states that fifty-five units will be affordable to households in the 51% to 80% AMI category, fifty-five units will be reserved for the 81% to100% AMI category, fifty-five units will be reserved for the 101% to 120% AMI category, and thirty units will fall within the 121% to 140% AMI category. Please clarify if the proposed project will offer units to household earning less than 80% AMI.

654

EXHIBIT G

Affordable Housing

Maui's affordable housing crisis requires land use planning that prioritizes and maximizes affordable housing opportunities for local residents.[1]

Hawai'i families are in particular need of affordable housing units at or below low-moderate income levels. Notably, recent research shows that 91 percent of the rental housing demand in Maui is for rental units at or below 80% AMI. 80 percent of the rental housing demand is at 60% or below AMI. Only 8 percent of the Maui rental housing demand is for units that are at 80% AMI to 140% AMI, with only 3 percent of the demand at 120% AMI to 140% AMI.[2] For Native Hawaiians, 80 percent of the housing demand for rental units on Maui at 80% AMI or below.[3] As such, OHA is concerned that the proposed project does not adequately address the need for affordable housing. As proposed, income levels of all of the units, while still deemed 'affordable', do not address the need of 91 percent of Maui residents.

The applicant is seeking numerous exemptions under HRS § 201H-38, which, if granted, would provide the applicant with an estimated savings of $4,738,593, or $24,300 per unit. OHA seeks to ensure that the proposed project will truly meet the affordable housing needs of our Native Hawaiian beneficiaries, as well as families in Maui, before the exemptions are granted. According to the DEA, members of the Faith Action Community Equity (FACE) Maui – Affordable Housing Coalition raised concerns during a meeting on June 6, 2017, and suggested that the project should consider rents meeting 50% AMI or below. OHA is recommending that the developer consider funding alternatives (e.g. government grants or subsidies) that would allow the project to meet the needs of the community and offer rental units to families/individuals below 80% AMI.

OHA requests additional information regarding the number of years the project will commit to maintaining the project as affordable; an indication of the number of units allotted for family, elderly, homeless, and tenants with special housing needs; and information regarding the number of studio, 1-bedroom, 2-bedroom, and 3-bedroom units that will be allotted for each AMI level. OHA believes that this information is pertinent to the assessment of the project's socioeconomic impacts and should be included in the DEA.

Impacts to Cultural Resources

OHA is concerned that the archaeological inventory survey (AIS) conducted of the project parcel did not adequately attempt to identify subsurface cultural resources and/or iwi kūpuna (human remains/burials) in the project area. The AIS report states that the subject parcel is "located along the culturally sensitive Wailae Road/Lower Main Corridor which is known to contain numerous traditional burials and extensive habitation sites." The report also states that the eastern portion of the project parcel is known to contain Pu'uone Sand that is likely overlying Iago silty clay soils. OHA notes that it is common knowledge that there is a high likelihood of

[1] The 2016 Hawai'i Housing Planning Study shows very limited demand for market-rate housing. Instead, the majority of demand for Native Hawaiians, the State, as well as Maui County, is almost entirely for units that are affordable. *See* SMS, HAWAI'I HOUSING PLANNING STUDY 34 (2016), *available at* https://dbedt.hawaii.gov/hhfdc/files/2017/03/State_HHPS2016_Report_031317_final.pdf.
[2] *Id.* at 34.
[3] *Id.* at 72.

encountering iwi kūpuna when doing ground disturbing activities in and around sand deposits and dunes. The AIS report identifies several instances where iwi kūpuna were disturbed in the vicinity of the project area.

According to the AIS report eleven test trenches were excavated in the 14.4-acre project area. The report indicates that the project parcel has undergone extensive disturbances from grubbing and grading for sugar cane cultivation, sand mining, and recent construction activities. OHA requests a map identifying the test trenches in relation to the areas of the project parcel that have undergone disturbance and a map identifying the location of the test trenches in relation to the soil types in the project parcel. We also request information regarding the depth of the prior sand mining. Given that a portion of the project area is believed to be underlain by sandy soils and that the project area is located in a close proximity to identified iwi kūpuna, OHA is concerned that the eleven test trenches were insufficient to identify the presence or absence of subsurface cultural resources and/or iwi kūpuna. OHA recommends conducting additional test trenches to identify the extent of the previous land disturbance and to identify the areas of the project parcel that is underlain by sandy soils.

Mahalo for the initiating consultation. Should you have any questions, please contact Teresa Kaneakua, OHA Lead Compliance Specialist, at (808) 594-0231 or teresak@oha.org.

'O wau iho nō me ka 'oia 'i'o,

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer

KC:tk

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Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer
State of Hawai'i
Office of Hawaiian Affairs
560 N. Nimitz Highway, Suite 200
Honolulu, Hawai'i 96817

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064 (HRD 18-8305D)

Dear Dr. Crabbe:

Thank you for your letter of May 10, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. We understand that the concerns raised in the Department's previously issued comment letter dated October 25, 2017 are still applicable, and have been reiterated in your current letter of May 10th. In this regard, we have summarized your comments and have provided responses for your consideration.

Comment:

Information presented on page 8 of the Draft Environmental Assessment (EA) provides a breakdown of units to be allocated to the various area median income (AMI) categories. Please clarify if the proposed project will offer units to households earning less than 80% AMI.

Response:

Fifty five (55) units will be set aside for qualifying individuals and families in the low income AMI category. These prospective renters would fall in the 51% to 80% AMI group.

Comment:

Hawai'i families are in particular need of affordable housing units at or below low-moderate income levels. As proposed, the income levels of all of the units, while still

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 • Honolulu, Hawaii 96813 • Tel: 808.983.1233
www.munekiyohiraga.com

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deemed "affordable", do not address the need of 91 percent of Maui residents.

Response:

Legacy Wailuku LLC understands that the housing need for Maui's workforce families is significant. They also recognize that the greater the number of affordable units provided for lower AMI groups, the greater the benefits for the 91 percent demand group cited in your letter. In this context, Legacy Wailuku LLC believes that the solution to the housing problem will involve a combination of project types, all of which will offer a complementary set of products to support Maui's workforce families. These include government subsidized projects which can meet the needs of the lower AMI target groups, as well as privately funded projects such as the Wailuku Apartment Rental Housing Project, which will bring new rental inventory for a broader range of AMI target groups.

It is also noted that rental projects generally can serve a much broader market with incomes ranging from 20 percent to 140 percent AMI. Households that rent can be composed of unrelated individuals (roommates), which is very common. The combined income of all adult occupants is used to determine eligibility (i.e., three individuals that are at 47 percent AMI equals a household with 140 percent AMI income. Creating additional supply of workforce housing (80 percent to 140 percent AMI priced rental units) will provide quality housing stock to lower income and workforce households.

Comment:

OHA is recommending that the developer consider funding alternatives (e.g., government grants or subsidies) that would allow the project to meet the needs of the community and offer rental units to families/individuals below 80% AMI.

Response:

As noted above, Legacy Wailuku LLC views the solution to the Island's housing crisis as one which requires a variety of development approaches, including the development of privately funded rental housing. They also recognize that the use of government subsidies will address the needs of the lower AMI target groups, but that such subsidies may be limited in availability for the Island of Maui. State and federal funds are finite year to year and limited to help subsidize housing, with a growing waitlist. Therefore, Legacy Wailuku LLC has chosen to avoid accessing any direct subsidies from the government in favor of privately funding and financing to deliver much needed housing in a timely manner. By renting affordable units to Section 8 Housing Choice voucher holders, Wailuku Apartments will be able to assist families/individuals below 80 percent AMI.

Comment:

OHA requests additional information regarding the number of years the project will commit to maintaining its affordability; an indication of the number of units allotted for family, elderly, homeless and tenants with special needs; and information regarding the number of studio, 1-bedroom, 2-bedroom and 3-bedroom units that will be allotted to each AMI level. This information is pertinent to the assessment of socio-economic impacts.

Response:

The project will be affordable for 30 years. At that point, Legacy Wailuku LLC may renew its affordability commitment or may sell the units under a pricing protocol yet to be determined. At that time, coordination with the County of Maui will be undertaken to develop a continuity scenario which may be considered reasonable for all parties.

With respect to tenant mix, the project is not intended to address specific tenant types (e.g., elderly, special needs), and is not viewed as a homeless solution project. There will be ADA accessible units capable of accommodating persons with disabilities. In general, the target group for the project are those income qualified individuals who are in need of affordable housing.

With respect to product type (i.e., studio, 1-bedroom, 2-bedroom, 3-bedroom) allocation by AMI category, Legacy Wailuku LLC has not made specific assignments relative to the number of units by product type to be assigned to the respective AMI categories. As a general principle however, studios and 1-bedroom units, having the lower monthly rental amounts will be set aside for the lower AMI qualifying individuals and/or families.

From the standpoint of socio-economic impacts, we believe that the EA appropriately addresses the project's impacts relating to housing needs, particularly in the context of the Wailuku Apartment Rental Housing Project's objective of providing a total of 324, with 60% to fall within the affordable AMI group and 40% within the market category. As previously noted, the project's private funding model, does not allow for the reallocation of units to lower AMI categories, which may be more appropriate for government subsidized projects.

Comment:

OHA is concerned that the archaeological inventory survey conducted for the project did not adequately attempt to identify subsurface cultural resources and/or iwi kupuna in the project area.

Response:

While we note your comment, we also note that the project's archaeological assessment has been reviewed and accepted by the State Historic Preservation Division. (SHPD). Given the potential for encountering subsurface cultural resources as OHA has noted, and as indicated by the SHPD, the Applicant's archaeologist will prepare and implement during construction, an Archaeological Monitoring Plan.

Comment:

OHA requests a map identifying the test trenches in relation to the areas of the project parcel that have undergone disturbance and a map identifying the location of the test trenches in relation to the soil types in the project parcel. We also request information regarding the depth of the prior sand mining. OHA is concerned that the eleven test trenches were insufficient to identify the presence or absence of subsurface cultural resources and/or iwi kupuna. OHA recommends conducting additional test trenches to identify the extent of the previous land disturbance and to identify the areas of the project parcel that is underlain by sandy soil.

Response:

As previously noted, the SHPD has concluded their Chapter 6E-42 Historic Preservation Review for the subject property and has accepted the draft archaeological assessment. Towards addressing concerns relating to the historic and cultural resources, as noted by OHA, the SHPD has requested that the project proceed under archaeological monitoring. Legacy Wailuku LLC will contract the archaeologist to prepare an Archaeological Monitoring Plan consistent with the stipulations set forth by the SHPD. The monitoring plan shall be submitted to the SHPD for review and acceptance, and shall comply with Hawai'i Administrative Rules 13-279-4. As noted in your letter, the archaeologist will prepare the maps requested and will include the maps in the Archaeological Monitoring Plan.

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me at email erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Lisa Rotunno-Hazuka, Archaeological Services Hawaii
Ben Lee, Clifford Planning & Architecture
Darren Unemori, Warren S. Unemori Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

KA'ALA BUENCONSEJO
Director

BRIANNE L. SAVAGE
Deputy Director

DEPARTMENT OF PARKS & RECREATION
700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

(808) 270-7230
FAX (808) 270-7934

MAY 10 2018

May 4, 2018

Ms. Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Suyama:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT AT TMK: (2) 3-5-001:064, WAILUKU, MAUI, HAWAII

Thank you for the opportunity to review and comment on the subject project. The Department of Parks and Recreation (DPR) does not have any comments or objections to the project. Once the applicant provides DPR with a copy of the fully executed 201H HRS affordable housing agreement with the Department of Housing and Human Concerns, DPR will provide exemption from Maui County Code Section 18.16.320 Parks and Playgrounds.

Should you have any questions or concerns, please feel free to call me, or Robert Halvorson, Chief of Planning and Development, at 270-7931.

Sincerely,

KA'ALA BUENCONSEJO
Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning and Development

KB:RH:do

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Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 29, 2018

Ka'ala Buenconsejo, Director
County of Maui
Department of Parks and Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Buenconsejo:

Thank you for your letter of May 4, 2018 regarding the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. The project Applicant, Legacy Wailuku LLC, understands that the Department has no comments or objection to the proposed project. As you have noted, upon execution of the affordable housing agreement, coordination will be undertaken with the Department to exempt the project from Maui County Code Section 18.16.320 relating to Parks and Playgrounds.

Thank you again for providing your response on the Draft Environmental Assessment (EA). A copy of your letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

May 8, 2018

Mr. Ken T. Takahashi
Hawaii Housing Finance Development Corporation
677 Queen Street
Honolulu, Hawaii 96813

Dear Mr. Takahashi:

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR WAILUKU AFFORDABLE HOUSING PROJECT, WAILUKU, ISLAND OF MAUI, HAWAII; TMK: (2) 3-5-001:064 (EAC 2018/0003)

The Department of Planning (Department) is in receipt of the above-referenced Draft EA for the proposed Wailuku Affordable Housing Project. The Department understands that the concept has not changed much since originally proposed by the Bagoyo Development Consulting Group in the Draft published in the September 23, 2017, Office of Environmental Quality Control (OEQC) Notice. We note that there are currently more parking stalls proposed, 661 instead of 486 as previously proposed. For the Final EA, the Department provides the following comments:

1. On the Conceptual Building Elevations, the buildings are painted red and yellow. Please consider painting them in more neutral tones, so as to blend in with the surrounding landscape.

2. In the agricultural portion of the description of existing conditions, there is no mention of how the proposed project will justify its removal from agricultural use, as it is designated as "Prime" land with "A" productivity, which is the highest productivity capacity for agricultural land. We encourage you to include such a discussion in the Final EA.

3. The Traffic Impact Assessment Report does not factor in the possible development of one (1) of the Applicant's other business ventures, the Waikapu Affordable Workforce Housing Project, which is being proposed at Tax Map Key (TMK) (2) 3-5-002:012 (POR.) and will consist of sixty eight (68) single-family units and twelve (12) duplex units. Please relay this information to your traffic consultant for revision of the Traffic Impact Assessment Report for the Final EA.

   In addition, please have your engineer consider that traffic frequently backs up along Kuikahi Drive during morning and afternoon rush hours; please consider limiting access to the site to Waiale Road only, or limiting

ONE MAIN PLAZA BUILDING / 2200 MAIN STREET, SUITE 315 / WAILUKU, MAUI, HAWAII 96793
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CURRENT DIVISION (808) 270-8205 / LONG RANGE DIVISION (808) 270-7214 / ZONING DIVISION (808) 270-7253

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access off of Kuikahi Drive to right-turn exit only. Please include such discussion in your revised Traffic Impact Assessment Report for the Final EA.

4. We noticed that in your agency comments, there was no response from the Department of Parks and Recreation (Parks) on development of your four (4) play areas. We strongly encourage coordination Parks and obtainment of written agency comments to be included in the Final EA.

5. On page 200, there is mention that informational meetings were held with various community associations; however, no minutes were included. We note that there was a letter from the Board of one (1) of the subdivisions, but none of the others commented. Please include minutes from those meetings and/or note how many people attended.

6. We noted the concern on visual impacts from Honoapiilani Highway previously. In the view analysis in the Draft EA, from view 1, Honoapiilani Highway sits at an elevation of 362 feet (ft.). The building 9 roof ridge is at the 387 ft. elevation. From view 2, the highway sits at an elevation of 362 ft. and the building 8 roof ridge is at the 383 ft. elevation. As currently proposed, one (1) of the buildings still blocks the view 1 perspective from the highway by about 25 ft. and view 2 by 21 ft. As a result of the elevation differences, there will still be a blockage of views of the harbor and of Haleakala from the highway in either direction. We recognize there is a need for affordable housing and also the need for the developer to earn a profit; however, we strongly urge the Applicant to consider eliminating one (1) story off of the proposed concept and/or situating the buildings, similar to the Kehalani Foodland, which will mitigate adverse view impacts off of the highway.

7. Please incorporate some pedestrian pathways so that residents can more easily and safely traverse the project area and go to the swimming pool/community center and pedestrian crossing to go to Foodland, McDonald's, etc.

8. Please ensure that there is adequate lighting for resident's safety, as per comments from the Maui Police Department. Also ensure that the lighting is downshielded, as per the flora/fauna consultant's recommendation.

9. Per our Zoning Administration and Enforcement Division, on page 192, number 14, please delete the verbage from, "MCC 19.30A.050," through the end of the development standards, and replace with the following, "all of MCC 19.30A, and instead have MCC 19.12, A-2 Apartment District zoning apply to this project."

Thank you for the opportunity to comment. Please include the Department on the distribution list for the new Final EA. Should you require further clarification, please contact Staff Planner Tara Furukawa by email at tara.furukawa@mauicounty.gov or by phone at (808) 270-7520.

Sincerely,

WILLIAM SPENCE
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
John S. Rapacz, Planning Program Administrator (PDF)
Pam Eaton, Planning Program Administrator (PDF)
Tara K. Furukawa, Staff Planner (PDF)
Danny Dias, Planning Supervisor (PDF)
Linda Schatz, Legacy Wailuku LLC (PDF)
Michael Munekiyo, AICP President, Munekiyo Hiraga (PDF)
Colleen Suyama, Senior Associate, Munekiyo Hiraga (PDF)
Kehalani Agricultural Investors LLC (PDF)
Project File

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Mark Alexander Roy
VICE PRESIDENT
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VICE PRESIDENT

June 28, 2018

Mr. William Spence, Director
County of Maui
Department of Planning
One Main Plaza Building
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Spence:

Thank you for your letter of May 8, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we are providing information and clarification to address each of your comments, as follows:

Comment No. 1:

On the Conceptual Building Elevations, the buildings are painted red and yellow. Please consider painting them in more neutral tones, so as to blend in with the surrounding landscape.

Response:

The Applicant will review building paint colors and consider using more neutral tones to blend with the surrounding landscape.

Comment No. 2:

In the agricultural portion of the description of existing conditions, there is no mention of how the proposed project will justify its removal from agricultural use, as it is designated as "Prime" land with "A" productivity, which is the highest productivity capacity for agricultural land. We encourage you to include such a discussion in the Final EA.

Response:

Section II.A.4 of the Environmental Assessment, relating to "Agricultural Productivity Considerations will be revised to include additional discussion relating to the justification for the removal of lands from agricultural use.

Comment No. 3:

The Traffic Impact Assessment Report does not factor in the possible development of one (1) of the Applicant's other business ventures, the Waikapu Affordable Workforce Housing Project, which is being proposed at Tax Map Key (TMK) (2) 3-5-002:012 (POR.) and will consist of sixty eight (68) single-family units and twelve (12) duplex units. Please relay this information to your traffic consultant for revision of the Traffic Impact Assessment Report for the Final EA.

In addition, please have your engineer consider that traffic frequently backs up along Kuikahi Drive during morning and afternoon rush hours; please consider limiting access to the site to Waiale Road only, or limiting access off of Kuikahi Drive to right-turn exit only. Please include such discussion in your revised Traffic Impact Assessment Report for the Final EA.

Response:

The Department's comments regarding traffic have been provided to the project's traffic engineer. The engineer will update the TIAR to recognize the 68-unit Waikapū Affordable Workforce Housing Project.

The traffic engineer will also review the traffic analysis relating to access to the project site from Wai'ale Road only, or limiting access to/from Ku'ikahi Drive to right-turn in and right-turn out only.

Comment No. 4:

We noticed that in your agency comments, there was no response from the Department of Parks and Recreation (Parks) on development of your four (4) play areas. We strongly encourage coordination Parks and obtainment of written agency comments to be included in the Final EA.

Response:

A comment letter has been received from the Department of Parks and Recreation.

Their comment letter is attached hereto for you reference **(Exhibit "A")** and will be included in the Final EA.

Comment No. 5:

On page 200, there is mention that informational meetings were held with various community associations; however, no minutes were included. We note that there was a letter from the Board of one (1) of the subdivisions, but none of the others commented. Please include minutes from those meetings and/or note how many people attended.

Response:

Information relating to community meetings has been provided by the Applicant and is attached hereto as **Exhibit "B"**.

Comment No. 6:

We noted the concern on visual impacts from Honoapiilani Highway previously. In the view analysis in the Draft EA, from view 1, Honoapiilani Highway sits at an elevation of 362 feet (ft.). The building 9 roof ridge is at the 387 ft. elevation. From view 2, the highway sits at an elevation of 362 ft. and the building 8 roof ridge is at the 383 ft. elevation. As currently proposed, one (1) of the buildings still blocks the view 1 perspective from the highway by about 25 ft. and view 2 by 21 ft. As a result of the elevation differences, there will still be a blockage of views of the harbor and of Haleakala from the highway in either direction. We recognize there is a need for affordable housing and also the need for the developer to earn a profit; however, we strongly urge the Applicant to consider eliminating one (1) story off of the proposed concept and/or situating the buildings, similar to the Kehalani Foodland, which will mitigate adverse view impacts off of the highway.

Response:

The view analysis was prepared to reflect the provision of corridors through which views of the ocean (towards Kahului) and Haleakalā would be preserved. According to the project architect, the rendering perspectives, views 1 and 2, were taken at the corners of the property along Honoapi'ilani Highway and illustrate that views of the ocean and the upper portion of Haleakalā would not be blocked from these two (2) vantage points. The views, however, would be blocked if a person or a passenger(s) in a vehicle is positioned directly in front of the buildings. The buildings are sited at an angle from the highway with setbacks approximately 63 feet to 108 feet on Building 8 and 136 feet to 181 feet on Building 9. The setbacks are substantially greater than the minimum 15-foot front yard setback in Residential Districts and 25-foot minimum setback in

Agricultural Districts. The two (2) buildings are spaced approximately 78 feet apart.

The length of the property along the highway is about 900 feet. The total length of the two (2) buildings, each measuring 183 feet in length, is about 366 feet and occupies 40 percent of the highway frontage. The intermittent views of these two (2) buildings seen from a vehicle traveling at 35 mph in either direction would be about 7 seconds. The large setbacks and the conceptual landscape plan with hedge and trees proposed along the highway would reduce the visual impact of Buildings 8 and 9 seen from Honoapi'ilani Highway. Lowering the height of the building by one (1) story would reduce the project by 24 units (12 units in each building). The reduction in the number of units would make the project infeasible.

Comment No. 7:

Please incorporate some pedestrian pathways so that residents can more easily and safely traverse the project area and go to the swimming pool/community center and pedestrian crossing to go to Foodland, McDonald's, etc.

Response:

As design of the project progresses, internal pedestrian pathways will be added to ensure that access to internal destination points can be accessed in a safe manner.

Comment No. 8:

Please ensure that there is adequate lighting for resident's safety, as per comments from the Maui Police Department. Also ensure that the lighting is down-shielded, as per the flora/fauna consultant's recommendation.

Response:

Onsite lighting will be designed to address resident safety needs. Fixture types (i.e., down-shielded) will be selected to ensure that adverse effects to wildlife are mitigated.

Comment No. 9:

Per our Zoning Administration and Enforcement Division, on page 192, number 14, please delete the verbage from, "MCC 19.30A.050," through the end of the development standards, and replace with the following, "all of MCC 19.30A, and instead have MCC 19.12, A-2 Apartment District zoning apply to this project."

Response:

Exemption No. 14 on page 192 will be revised to reflect the applicability of the A-2, Apartment District zoning standards.

Thank you again for providing comments on the Draft Environmental Assessment (EA). A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh

cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Darren Unemori, Warren S. Unemori Engineering, Inc.
Ben Lee, Clifford Planning & Architecture LLC
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ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

POLICE DEPARTMENT
COUNTY OF MAUI

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

TIVOLI S. FAAUMU
CHIEF OF POLICE

DEAN M. RICKARD
DEPUTY CHIEF OF POLICE

April 16, 2018

Ms. Colleen Suyama
Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Subject: **Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at TMK (2) 3-5-001:064, Wailuku, Maui, Hawaii**

Dear Ms. Suyama:

This is in response to your letter dated April 6, 2018 requesting comments to the Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing project.

In review of the submitted documents, concerns from the police perspective are upon the safety of pedestrians and vehicular movement. Consideration is requested for the installation of sufficient lighting for the safety of motorist and also to assist as a crime prevention/deterrence. All vehicular traffic in the immediate and surrounding areas must be carefully considered and planned for to lessen the impact of congestion during peak morning and evening times.

Thank you for giving us the opportunity to comment on this project.

Sincerely,

Assistant Chief John Jakubczak
for: TIVOLI S. FAAUMU
Chief of Police

691

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Michael T. Munekiyo
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VICE PRESIDENT

June 28, 2018

Tivoli Faaumu, Chief of Police
Police Department
County of Maui
55 Mahalani Street
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Chief Faaumu:

Thank you for your letter of April 16, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we have summarized your comments and provide the following responses.

Comment No. 1:

The Department's concern center on pedestrian safety and safety related to vehicular movements. Consider sufficient lighting for safety of motorists and for crime prevention/deterrence.

Response: Onsite lighting will be provided in a manner which supports safety for both pedestrians and motorists. In addition, lighting and landscaping will consider environmental design factors which prevent and deter crime.

Comment No. 2:

Vehicular traffic in the immediate and surrounding areas must be considered and planned to lesson impacts of congestion during peak hours.

Response: The project's traffic engineer has examined traffic impacts associated with the proposed action. Appropriate measures will be implemented to ensure that traffic impacts attributed to the project are minimized. A copy of the Traffic Impact Assessment Report is included in the Environmental Assessment (EA) document.

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:yp
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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May 8, 2018

To: **Mr. Ken Takahashi,** (808) 587-0547, ken.t.takahashi@hawaii.gov
677 Queen Street, Room 300, Honolulu, HI 96813
To: **Ms. Linda Schatz** (808) 428-8717 lindaschatz@schatzcollaborative.com
Legacy Wailuku, LLC; 114 Olomana Lane, Honolulu, Hawaii 96813
To: **Mr. Michael Munekiyo**, AICP, (808) 244-2015, planning@munekiyohiraga.com
Munekiyo Hiraga; 305 High Street, Suite 104, Wailuku, Hawaii 96793
To: **Mr. Vince Bagoyo** 808-357-3842 vbagoyo-devgroup@hawaii.rr.com
V. Bagoyo Development Consulting Group, LLC 1500 Kilinoe Pl., Wailuku, HI 96793

From: Maui Tomorrow Foundation
55 N. Church St. Ste A4
Wailuku, HI 96793

Michael Williams, Chair, Affordable Housing Committee, Maui Tomorrow Foundation
MichaelWilliams@PueoFarm.com
808-264-4884

Re: Revised Wailuku Apartment Rental Housing Project DEA (AFNSI)

Since much of the material in this revised draft EA is similar to the original draft EA, and because the response comments by Bagoyo Development Consulting Group did not adequately respond to our original comments, MTF is resubmitting parts of its original October-2017 letter with some supplementary material commenting on revisions in the draft EA.

This revised EA has improved upon the original DEA document in some respects, which we acknowledge below.

Many affordable housing projects are needed on Maui, but this one should not be called "affordable" because it includes too many market units resulting in a very crowded project with undesirable impacts; far too many 201-h exemptions that will cost the community more than the construction of a few "affordable units; and many severe impacts (some disclosed and others not described) that trigger the legal requirement of a complete EIS, (not just an EA with a FONSI).

Specific comments on the Wailuku Apartment Rental Housing Project D-EA (AFNSI):

1. **Full EIS**: This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do exist, a full Environmental Impact Statement (EIS) is legally required. the Hawai'i Housing

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Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project, should undertake a full EIS to examine the many significant impacts and how they will be mitigated.

2. **Implementation**: This REVISED Housing Project DEA mentions numerous significant and adverse impacts (intersections at "F levels", schools already beyond capacity, distance from parks with no safe routes, distant bus stops, etc.) and discusses some possible mitigating solutions, but it does not promise to implement the needed mitigations.

3. **Exemptions**: The Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, fire safety standards, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes (DEA p 5).

The document includes an absurdly high number of major exemptions (18 pages listed on D-EA pages 208-213, and in more detail on PDF Pages 1147-1158) that are being requested. The very fact that these 18 pages of exemptions (the most we have yet to see in any 201H-38 project) are included means that there are numerous significant impacts that the applicant wishes to not disclose. Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, and so on, must be discussed and mitigated. They are not.

4. **Traffic**: The Draft-EA's major omissions relate to traffic (PDF 55-73 + Appendix H).

4.1 The Draft-EA TIAR traffic analysis has selectively underestimated the future impacts from several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center.

Both of these projects have already received initial entitlements, and it is likely that they will soon be impacting this 201H apartment project's traffic in a _significant, adverse manner. Similarly, this Wailuku Apartment Rental Housing will be impacting the traffic of those projects. A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts. Those other projects in their full EISs provided comprehensive TIAR information, but they did not include this Wailuku Apartment Rental Housing in their TIAR analysis. Just as the serious, adverse traffic impacts of those projects required a full EIS, so does the cumulative traffic impacts of this one. Traffic jams are the result of the total effect of all traffic in the immediate area. This projects traffic effects will overwhelm the surrounding streets and intersections unless the County first or at least simultaneously widens some of the nearby roads.

4.2 In addition to not completely considering the planned growth of nearby projects, the DEA has not considered the effects of new highways that will affect the flows of traffic. For example, if the Waiale Road is extended southward to Honopiilani Hwy. there will be a great increase on all of the intersections on Waiale Road, especially those near this project. (See PDF 933:

The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, since they are unlikely to be built by Year 2021 given their current status, these roadway improvements were not included in this TIAR. They should have been included. A full EIS would evaluate the cumulative impacts of this project once such roadway changes have been made.

Once all of the following housing rojects are completed, it is likely that the cumulative future traffic being generated from these five nearby projects could significantly and adversely affect the already very limited roads in the area: Waikapu (1,440) +adjacent Waiale Road projects (146) + A&B Waiale (2,550) + Maui Lani (935) + Kehalani (956) + this Wailuku Apt. project (324)} = 6,351 units in this already congested area. The HHFDC and the Maui Planning Organization (MPO) should require that, along with the other developers, Wailuku Apartment Rental Housing Project provide a "fair share" of the cost of a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems. The HHFDC and MPO should also require this Wailuku Apartment Rental Housing project to pay its "fair share" to upgrade the highways, roads and intersections in this area.

4.3 Even though this project will not be completed until at least 2021, the TIAR has used 2021 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

5. **Housing Unit Numbers**: Draft-EA Page 16: Although this project is being described as a 201H affordable housing rental project, only 110 out of 324 units (only 34% of the units) are for those under 100% of Maui's median income (the AMI). In other words, 214 units (the vast majority) are for those families with incomes above the median Maui family income, either as 190 market units or 24 higher rent affordables.

This is hardly an affordable housing project if over half the people in Maui would be unable to afford to rent a unit in the project. The HHFDC should not allow an apartment project of this density, with so many 201H exemptions, unless at least half of the units are affordable to those earning less than 100% of the average family income.

With regard to the number of available units, and especially the number of available affordable units, there are inconsistencies in the Draft-EA. For example: It clearly states on PDF page 25 that the affordable units will be rented out only to those between 80% and 140%. However, on the immediately preceding page in table 2 it indicates that there will be 55 units rented out to those between 51 to 80%. Which is the plan?

Another example: throughout the draft EA it is stated that there will be 324 total units. However in the table on PDF page 906, a total of 301 units is used.

6. **This project is actually a short term rental hotel for off-shore residents.** The DEA cites as good authority a "Central Maui Market Rental Study" (pdf pages 24-25, internally numbered as pp 8-9), from their consultant, which reveals the real, intended market for this project. This Study is attached as Appendix G to the DEA, pp 850 to 907 of the pdf. 694

On page 881:

"The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to *offshore demand* in a significant way - significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a *3-month lease period* is important, as that can take advantage of *seasonal demand* - meaning the winter and the summer 'high' periods.' (Emphasis added.)

On page 885:

"A good part of the demand for these units - especially studios, we believe - would be the market to enjoy a 3-4 month stay - using these units as a substitute for hotel rooms."

Page 900:

"We expect that Maui's visitor industry will continue to enjoy success and thereby **cultivate amongst a portion of the shortterm visitors a desire to lengthen their stay the following trip by renting a unit for 3 months, the minimum period for this project.** We expect the demand here coming out of Canada and the northern states of the US." (Emphasis added.)

Page 901:

"We see all sources of demand being present and accounted for . . . Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility. **We suggest there be a healthy mix, as the local presence will make the project more attractive to the offshore rental demand.**" (Emphasis added.)

Page 905:

"There will be additional demand from offshore renters. It may be likely that **offshore demand might even be as high as a quarter or a third of the units**. A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that **there is an apparent offshore demand for these types of units.**" (Emphasis added.)

Page 906:

"PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bed room unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bed room unit, as that has the deepest demographic, as an affordable unit. **Plus, we expect very good offshore demand for a small unit, such as this.**

"Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families. **We also see a good potential demand for renting them out on the minimum lease of 3 months to offshore visitors**, grandparents who will cycle their grandchildren through the unit over the summer or winter months." (Emphasis added.)

Maui County has been taking steps to rein in the explosive growth of short term rentals outside hotel zones. This project should not be allowed so many exemptions if it is not meeting the need for more long term housing of local residents.

7. **Population**: The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.

8. **Schools** which will service the Wailuku Apartment Rental Housing Project's many families, are all significantly over capacity now.

> **"Pu'u Kukui Elementary School** is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years. **Maui Waena Intermediate School** is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years. **Maui High School** is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years." (Draft-EA PDF page 53)

The Applicant has tried to mitigate this objection to its first DEA by agreeing to pay the small school impact fee to the State (far less than $1 million), but this amount will not begin to satisfy the DOE's ability to build the additional classrooms or improve the schools' capacities.
South Maui cannot even gets its high school built.

9. **Finances**: Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Apartment Rental Housing project. They have already received several entitlements without trying to get any 201-h exemptions.

10. **Play Areas and Parks**: The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great. Among the 1,000 residents there will be many toddlers who will be able to use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). But the greater impact will fall on the 100+ children of school age. These children will need to get to parks and playing fields along streets lacking bicycle routes and with minimum sidewalks and by crossing several very busy and dangerous high traffic avenues.
The so called "swimming pool" appears to be merely a small wading pool, totally insufficient for 1,000 residents.

11. **Solid Waste**: The Draft-EA does not show any locations for solid waste disposal / trash bins. There will be many of these for 324 units. Nor does it seem that big rubbish trucks will

able to turn around at the end of the 300'+ driveway. Backing up early in the morning will be a noisy disturbance. The response to this statement in my previous letter was incomplete and inadequate, only that the developer would look into it. However, that did not happen.

12. **Pedestrian Safety**: This revised DEA has many improved safety features for pedestrians: sidewalks on Kuikahi and a cross-walk from the project to Foodland and Longs.

Unfortunately, there is only a partial sidewalk along Waiale Road. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. To get to the nearby stores they will need a complete sidewalk along Waiale and it should be provided south of the Waiale Road exit/entrance. Because the project can gain 201H approval only if "the proposed housing project is consistent with the purpose and intent of Section 201H-38, HRS, and the project's design meets all health and life safety requirements per the building code and Maui County Code."

13. **A&B's 2,550 unit Waiale project:** Maps on PDF pages 18 +35 and throughout the DEA do not show the major project to the South and to the East. The map and text should include the largest project (A&B's 2,550 unit Waiale project), the one that will have the greatest impact on the proposed Wailuku Apt project, and vice versa will be affected by this Wailuku Apartment project.

14. **Water:** The Draft-EA PDF Pages 44 + 45 and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gallons for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with sizeable affordable units)?

15. **Parking**: The original draft contained only 486 parking stalls. This DEA has over 600. How was this change made? Have all the stalls been reduced in width/size? Will there be adequate parking space for pick-ups and larger vehicles? Special visitor parking? Handicapped parking?

16. **300 foot+ driveway, cul-du-sac**: Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night with 600+ cars, firetrucks will not be able to access all buildings because they cannot turn around, or even safely back-up. The DEA claims this safety danger is mitigated by sprinklers in the apartments, but this safety hazard by itself is a severe impact requiring a full EIS under the law.

17. **Project Management**: Will the County ever have any responsibilities if Legacy goes out of business? (Repairs? Ownership? Management? Utilities? Insurance? etc.)
Who will manage the property? Establish homeowner association fees?
These impacts are simply ignored.

18. **Long-Term:** After the 30 years what will happen? Will renters ever have the right to purchase? Will rents suddenly rise?

Mahalo for allowing us the opportunity to share our comments on the Draft-EA and to make our concerns known,

Michael L. Williams

Chair, Maui Tomorrow Foundation Affordable Housing Committee

CC Maui County Councilmember Stacey Crivello, Chair, Housing Committee
Maui County Councilmember Kelly King, Chair, Planning Committee
Maui County Councilmember Alika Atay, Wailuku Resident Councilmember
Director Carl Reimann, Maui County Housing and Human Affairs Department
Director Will Spence, Maui County Planning Department

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June 28, 2018

Michael Williams, Chair,
Affordable Housing Committee
Maui Tomorrow Foundation
55 North Church Street, Suite A4
Wailuku, Hawaii 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Williams:

Thank you for your letter of May 8, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We have restated your comments in the order presented in your letter and have provided responses to each, as follows:

Comment No. 1:

Full EIS: *This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do exist, a full Environmental Impact Statement (EIS) is legally required. the Hawai'i Housing Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project, should undertake a full EIS to examine the many significant impacts and how they will be mitigated.*

Response:

The project's technical characteristics and related impact considerations were thoroughly evaluated by Legacy Wailuku LLC, the Applicant, and the Hawaii Housing Finance & Development Corporation (HHFDC), the Approving Agency. In accordance with Hawaii Administrative Rules (HAR), Section 11-200-12, Significance Criteria, every phase of the 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 were considered. The analysis contained in the Draft Environmental Assessment (EA) was supported through in-depth technical studies that were prepared by qualified professionals, and which were then reviewed by agencies having jurisdiction and expertise in their respective fields of authority. Each section of the Draft EA included a discussion and analysis of the impacts related to the respective environmental, infrastructural, public service and socio-economic parameters. The assessment of each significance criteria set forth in Section 11-200-12, HAR is included as Chapter X of the Draft EA.

EXHIBIT H

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This chapter will be carried forward to the Final EA. The need for a full Environmental Impact Statement (EIS) is not deemed warranted in the context of the level of impacts, analysis and mitigation measures documented in the Draft EA.

***Comment No. 2*:**

***Implementation*:** *This REVISED Housing Project DEA mentions numerous significant and adverse impacts (intersections at "F levels", schools already beyond capacity, distance from parks with no safe routes, distant bus stops, etc.) and discusses some possible mitigating solutions, but it does not promise to implement the needed mitigations.*

***Response*:**

Where mitigation measures are required due to potential impacts attributed to the project, Legacy Wailuku LLC will implement those applicable measures, including measures to address impacts related to traffic, access to recreational facilities and access to bus stops. As a disclosure document, the Draft EA has allowed agencies to comment on the identified mitigation measures. If more specific mitigation measures are raised by agencies as project development advances, Legacy Wailuku LLC will continue dialogue with the applicable agencies to define how such measures can be addressed as part of the project engineering and design phases of work. As a Section 201H project, HHFDC, and the Maui County Council will be engaged in the process of ensuring that conditions or modifications requested of the applicant are complied with. In summary, Legacy Wailuku LLC seeks to be transparent in the 201H process to ensure that mitigation solutions are appropriately implemented.

***Comment No. 3*:**

***Exemptions*:** *The Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, fire safety standards, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201 H-38, Hawaii Revised Statutes (DEA p 5).*

The document includes an absurdly high number of major exemptions (18 pages listed on DEA pages 208-213, and in more detail on PDF Pages 1147-1158) that are being requested. The very fact that these 18 pages of exemptions (the most we have yet to see in any 201 H-38 project) are included means that there are numerous significant impacts that the applicant wishes to not disclose. Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, and so on, must be discussed and mitigated. They are not.

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***Response*:**

Legacy Wailuku LLC has recently undergone a vetting process for the requested exemptions with County agencies having jurisdiction over the applicable provisions of the Maui County Code. As a result, the list of exemptions is being revised, reduced, and streamlined to ensure that only those exemptions necessary to advance affordability while maintaining public health and safety, are proposed through the Section 201H process. The revised list of exemptions will be included in the Final EA and are not outside of the realm of what has been asked for in the past by other 201H projects. The lengthy number of pages represents Legacy Wailuku LLC's dedication to transparency and thoroughness in explaining the value, rationale, and specific purpose for the project. This thoroughness in explanation creates a lengthy document but the number of exemptions remains in line with other 201H projects that have been approved in the past by the Maui County Council. The final list of exemptions will be considered by the HHFDC and the Maui County Council in their respective decision-making processes for the 201H application.

***Comment No. 4*:**

***Traffic*:** *The Draft-EA's major omissions relate to traffic (PDF 55-73 +Appendix H).*

***Comment No. 4.1*:**

The Draft-EA TIAR traffic analysis has selectively underestimated the future impacts from several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center.

Both of these projects have already received initial entitlements, and it is likely that they will soon be impacting this 201 H apartment project's traffic in a significant, adverse manner. Similarly, this Wailuku Apartment Rental Housing will be impacting the traffic of those projects. A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts. Those other projects in their full EISs provided comprehensive TIAR information, but they did not include this Wailuku Apartment Rental Housing in their TIAR analysis. Just as the serious, adverse traffic impacts of those projects required a full EIS, so does the cumulative traffic impacts of this one. Traffic jams are the result of the total effect of all traffic in the immediate area. This projects traffic effects will overwhelm the surrounding streets and intersections unless the County first or at least simultaneously widens some of the nearby roads.

***Response*:**

The Traffic Impact Assessment Report (TIAR) recognizes that the initial phase of the Waikapu Country Town project may be implemented by the Wailuku Apartment Rental Housing Project's 2021 base year. The TIAR also assumes that A&B's Waiale Project is unlikely to have units constructed by the base year. These assumptions, together with the accounting of ambient growth

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in the overall Wailuku region, were based on the traffic engineer's knowledge of local development conditions and the progress of specific proposed actions. The technical basis for and analysis of traffic impacts documented in the TIAR have been reviewed by the State Department of Transportation and the County Department of Public Works. The TIAR is considered to meet the traffic engineering reporting standards and quality control criteria.

Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help implement the regional traffic improvements cited in the TIAR. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income.

In summary, we believe that the project's TIAR appropriately addresses technical methodology requirements for analysis of project-related traffic impacts.

Comment No. 4.2:

In addition to not completely considering the planned growth of nearby projects, the DEA has not considered the effects of new highways that will affect the flows of traffic. For example, if the Waiale Road is extended southward to Honopiilani Hwy. there will be a great increase on all of the intersections on Waiale Road, especially those near this project. (See PDF 933:

The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, since they are unlikely to be built by Year 2021 given their current status, these roadway improvements were not included in this TIAR. They should have been included. A full EIS would evaluate the cumulative impacts of this project once such roadway changes have been made.

Once all of the following housing projects are completed, it is likely that the cumulative future traffic being generated from these five nearby projects could significantly and adversely affect the already very limited roads in the area: Waikapu (1,440) +adjacent Waiale Road projects (146) + A&B Waiale (2 ,550) +Maui Lani (935) + Kehalani (956) +this Wailuku Apt. project (324)} = 6,351 units in this already congested area. The HHFDC and the Maui Planning Organization (MPO) should require that, along with the other developers, Wailuku Apartment Rental Housing Project provide a "fair share" of the cost of a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems. The HHFDC and MPO should also require this Wailuku Apartment Rental Housing project to pay its "fair share" to upgrade the highways, roads and intersections in this area.

Response:

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The TIAR, which was updated in May 2018, recognizes that both the Waiale Road Extension and improvements to Waiko Road are planned improvements, but are not anticipated to be completed before the base year of 2021.The Chapter 343, HRS process for those projects will address their respective impacts prior to their implementation. With the potential changes in traffic volumes on Waiale Road as a result of these projects, the consideration of regional mitigation measures cited in the TIAR would appear to be appropriate complementary actions which can be implemented.

As noted above, Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help fund either comprehensive traffic studies or implement the regional traffic improvements cited in the TIAR. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income. As with other impact fees which may affect affordability, we support exemptions to impact fees which may adversely affect the ability to provide affordable housing to local residents.

Comment No. 4.3:

Even though this project will not be completed until at least 2021, the TIAR has used 2021 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

Response:

The TIAR considered trip generation from other projects having reasonable probability of being completed by the Base Year of 2021. The study used traffic engineering methodology and assumptions which are considered reasonable and appropriate. Importantly, the TIAR recognizes regional improvements which may address existing peak hour congestion issues. Such regional improvement needs are best addressed through a comprehensive traffic impact fee system which can be equitably applied to projects without adversely affecting the equally important goal of providing affordable housing to local working families.

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Comment No. 5:

Housing Unit Numbers: *Draft-EA Page 16: Although this project is being described as a 201 H affordable housing rental project, only 110 out of 324 units (only 34% of the units) are for those under 100% of Maui's median income (the AMI). In other words, 214 units (the vast majority) are for those families with incomes above the median Maui family income, either as 190 market units or 24 higher rent affordables.*

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With regard to the number of available units, and especially the number of available affordable units, there are inconsistencies in the Draft-EA. For example: It clearly states on PDF page 25 that the affordable units will be rented out only to those between 80% and 140%. However, on the immediately preceding page in table 2 it indicates that there will be 55 units rented out to those between 51 to 80%. Which is the plan?

Another example: throughout the draft EA it is stated that there will be 324 total units. However in the table on PDF page 906, a total of 301 units is used.

Response:

This project falls within the affordability purview of the HHFDC which states, "The HHFDC establishes its affordability threshold for projects as those projects that primarily are affordable to households with incomes at or below 140% of the area median income.[1]" Maui County Code, Chapter 2.96 also requires an income group distribution for the affordable units to be one-third very low- and low-income (50-80% AMI), one-third at below-moderate income at 80-100% AMI, and one-third at moderate income at 100-120%AMI. Affordability definition according to HUD is based on housing costs (either owned or rented) that is no more than 30% of a household's income. Our project will produce units following HHFDC's affordable rental guidelines as noted in **Table 2** of our EA with a unit distribution following Maui County's Chapter 2.96 requirements.

[1] HHFDC 201H Application, http://dbedt.hawaii.gov/hhfdc/201h-development-assistance/, page 1

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Table 2. HHFDC Maui Affordable Rental Guidelines, Distribution of Units by Income Category and Rental Ranges

Area Median Income Level	Income Group	Number of Units	Rental Range*	Percentage of Units
51–80%	Low income	55	$627 - $1,616*	17%
81-100%	Low-moderate income	55	$1,123 - $2,107*	17%
101-120%	Low-moderate income	55	$1,453 - $2,598*	17%
121-140%	Moderate income	30	$1,783 - $3,089*	9%
Subtotal of Affordable Units		**195**		60%
N/A	Market	129	—	40%
Grand Total		**324**		**100%**

* Note: Rents are based on 2018 HHFDC Rent Guidelines minus utility allowance. These are subject to change based on annually published rent guidelines and utility allowances by State and County agencies.

The high cost of living, construction costs, and land costs create an affordability problem for a large portion of the island's population. Meeting state and county affordability requirements and allowing a mixture of market rate units help to cross-subsidize a truly mixed income community that is healthy and does not require direct government subsidies. The project, due to the unit count and mix of incomes can be privately financed. Most rental projects of this scale in Hawaii require direct county or state subsidies to be financed and yield a very small number of units to meet the demand for local housing.

Because of the lack of supply, many families with higher incomes who need to rent are competing with families that are at lower incomes, absorbing the existing housing stock. With the introduction of this project, we provide new units that families earning over 100% AMI can also afford, thereby freeing up older housing stock for families that need low- to low-moderate rental units. Accordingly, the ripple effect in the marketplace goes beyond just what this project has to offer.

Regarding our commitments to income levels, Legacy Wailuku LLC will be offering 17% of rental units that will have rent ranges from 51%-80% AMI; 17% of the units will have rents ranging from 81%-100%AMI, and so forth.

With regard to inconsistencies in unit counts cited on page 906 of the Central Maui Rental Market Study and the final count of 324 units reflected in Chapter I of the EA, we note that the market study was done in advance of more detailed design and site planning work, and the 301 unit count was a preliminary estimate used to inform project programming parameters. The unit count of 324 is the correct number based on the detailed architectural studies subsequently performed. Studies relating to engineering and traffic which require greater specificity in unit count numbers, based their work on 324 units.

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Comment No. 6:

This project is actually a short term rental hotel for off-shore residents. *The DEA cites as good authority a "Central Maui Market Rental Study" (pdf pages 24-25, internally numbered as pp 8-9), from their consultant, which reveals the real, intended market for this project. This Study is attached as Appendix G to the DEA, pp 850 to 907 of the pdf.*

On page 881:

> *"The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to offshore demand in a significant way - significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a 3-month lease period is important, as that can take advantage of seasonal demand - meaning the winter and the summer 'high' periods.' (Emphasis added.)*

On page 885:

> *"A good part of the demand for these units - especially studios, we believe - would be the market to enjoy a 3-4 month stay - using these units as a substitute for hotel rooms."*

Page 900:

> *"We expect that Maui's visitor industry will continue to enjoy success and thereby* ***cultivate amongst a portion of the short-term visitors a desire to lengthen their stay the following trip by renting a unit for 3 months, the minimum period for this project.*** *We expect the demand here coming out of Canada and the northern states of the US." (Emphasis added.)*

Page 901 :

> *"We see all sources of demand being present and accounted for ... Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility.* ***We suggest there be a healthy mix, as the local presence will make the project more attractive to the offshore rental demand."*** *(Emphasis added.)*

Page 905:

> ***"There will be additional demand from offshore renters.*** *It may be likely that* ***offshore demand might even be as high as a quarter or a third of the units.*** *A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that* ***there is an apparent offshore demand for these types of units."*** *(Emphasis added.)*

Page 906:

> *"PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bed room unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bed room unit, as that has the deepest demographic, as an affordable unit.* ***Plus, we expect very good offshore demand for a small unit, such as this.***
>
> *"Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and*

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*above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families. **We also see a good potential demand for renting them out on the minimum lease of 3 months to offshore visitors**, grandparents who will cycle their grandchildren through the unit over the summer or winter months." (Emphasis added.)*

Maui County has been taking steps to rein in the explosive growth of short term rentals outside hotel zones. This project should not be allowed so many exemptions if it is not meeting the need for more long term housing of local residents.

Response:

Legacy Wailuku LLC is presenting this project as a long-term rental with a 30-year deed restriction to maintain the affordability commitment. The market study considered all options prior to the design and planning of the project. The market researcher's opinions on what is highest and best use and survey of supply and demand are shared in the report. What Legacy Wailuku LLC does as a development program is an independent decision of what the market researcher notes as highest and best use.

Legacy Wailuku LLC will not utilize any unit for short-term vacation rentals. We agree that the current Maui market has a glut of short-term vacation rentals that is impacting the local long-term rental supply. All 324 units will be long-term rentals as committed to in our 201H application.

With respect to page 885 regarding short term rental studios, this is a recommendation of the market researcher studying the highest and best use for the market. It does not mean that Legacy Wailuku LLC will do this in our development program. Again, our 201H application/EA commitment is to have all 324 units utilized as long-term rentals to meet the local demand.

Similarly, Legacy Wailuku LLC is committed to the local rental market. Targeting the "offshore rental market" is not an objective of the project.

Comment No. 7:

***Population:** The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.*

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.

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Response:

The Draft EA, through the Central Maui Rental Market Study (Cassiday, 2017; Appendix "G"), recognizes the demographic conditions leading to the need for more affordable rental units. The study acknowledges that the rental demand will be from local workforce families. The analysis of impacts presented in the Draft EA carefully examines each impact parameter (e.g., public services, infrastructure, etc.) and presents a thorough analysis of the impacts and related mitigation measures associated with each parameter. In conducting the analysis and in preparing the technical studies which are used as a basis for analyzing key parameters (e.g., traffic, infrastructure), there are no assumptions made as to the locational origin of prospective renters, nor are there assumptions made regarding the relationship of prospective tenant's locational origins and resulting level of impacts. We agree that impacts from the project should be independently analyzed irrespective of the relocation patterns of tenants.

Comment No. 8:

Schools *which will service the Wailuku Apartment Rental Housing Project's many families, are all significantly over capacity now.*

> *"**Pu'u Kukui Elementary School** is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years. **Maui Waena Intermediate School** is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years. **Maui High School** is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years." (Draft-EA PDF page 53)*

The Applicant has tried to mitigate this objection to its first DEA by agreeing to pay the small school impact fee to the State (far less than $1 million), but this amount will not begin to satisfy the DOE's ability to build the additional classrooms or improve the schools' capacities. South Maui cannot even gets its high school built.

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Response:

Legacy Wailuku LLC recognizes the current enrollment and capacity issues facing Central Maui schools, and is willing and ready to support and comply with the mitigation protocols that have been adopted by the Department of Education. Legacy Wailuku LLC also recognizes that school capacity concerns are community-wide issues, which must be addressed in the context of broader educational facilities capital improvements planning which will ensure quality education for our next generation of children. We understand that the provision of quality education must be equitably provided to residents of new housing units, whether located at Kehalani, Maui Lani or Waikapu, and that each housing provider will comply with impact fee requirements in place at the time of project implementation.

Comment No. 9:

Finances: *Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Apartment Rental Housing project. They have already received several entitlements without trying to get any 201-h exemptions.*

Response:

Legacy Wailuku LLC views the affordable housing crisis as one which requires multiple players, each able to contribute to the overall solution based on the level of expertise each is able to bring to the table. Development entities willing to help Maui's workforce families will approach the problem in ways which are unique, based on their respective long-term development objectives and housing development experience. Legacy Wailuku LLC is in a position to bring new affordable housing inventory to market in a relatively short timeframe, which is viewed as a positive outcome for the island's local families.

Both of the projects you reference also have the advantage of scale with thousands of units in their pipeline to spread costs and subsidize their affordability requirements. Their ratio of affordable to market is far less than what we are proposing. The Wailuku Apartment Rental Housing Project is not a large scale master planned community, but a 324-unit project with a distribution of 60% affordable and 40% market.

Comment No. 10:

Play Areas and Parks: *The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great. Among the 1,000 residents there will be many toddlers who will be able to use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the nccumber of young children who will be living here). But the greater impact will fall on the 100+ children of school age. These children will need to get to parks and playing fields along streets lacking bicycle routes and with minimum*

EXHIBIT H

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sidewalks and by crossing several very busy and dangerous high traffic avenues.

The so called "swimming pool" appears to be merely a small wading pool, totally insufficient for 1,000 residents.

Response:

Access to recreational facilities by residents, both children and adults, of the proposed Wailuku Apartment Rental Housing Project is an important aspect of the project's proximity to existing infrastructure and services. Sidewalks provided by the project will provide pedestrian connectivity to the Waiale Park, located along Waiale Road, adjacent to the Hale Makana O Waiale apartments, and the Maui Lani Regional Park, located along Maui Lani Parkway. The Waiale Park is located approximately 0.25 mile from the project site, while the Maui Lani Regional Park is located approximately 0.9 mile from the project site. Both are accessible via signalized crosswalks and continuous sidewalks.

Comment No. 11:

Solid Waste: *The Draft-EA does not show any locations for solid waste disposal I trash bins. There will be many of these for 324 units. Nor does it seem that big rubbish trucks will be able to turn around at the end of the 300'+ driveway. Backing up early in the morning will be a noisy disturbance. The response to this statement in my previous letter was incomplete and inadequate, only that the developer would look into it. However, that did not happen.*

Response:

The project's design consultants will identify locations suitable for placement of trash bins. As with fire truck turnaround solutions being coordinated with the Department of Fire and Public Safety, turnaround areas for waste collection trucks will be configured into the final site plan to ensure that trash collection can be efficiently and safely conducted and managed. It is noted that the cost for waste collection service will be included as part of each tenant's monthly rental amount.

Comment No. 12:

Pedestrian Safety: *This revised DEA has many improved safety features for pedestrians: sidewalks on Kuikahi and a cross-walk from the project to Foodland and Longs.*

Unfortunately, there is only a partial sidewalk along Waiale Road. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. To get to the nearby stores they will need a complete sidewalk along Waiale and it should be provided south of the Waiale Road exit/entrance. Because the project can gain 201 H approval only if "the proposed housing project is consistent with the purpose and intent of Section

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201 H-38, HRS, and the project's design meets all health and life safety requirements per the building code and Maui County Code."

Response:

While the provision of sidewalks along the entire length of Waiale Road is desirable, there is no continuity of sidewalks provided along previously developed parcels which border Waiale Road. We would, however, be happy to discuss collaborative, nexus-based opportunities for the provisions of sidewalks along Waiale Road with the County of Maui and other landowners whose properties border Waiale Road.

Comment No. 13:

A&B's 2,550 unit Waiale project: *Maps on PDF pages 18 +35 and throughout the DEA do not show the major project to the South and to the East. The map and text should include the largest project (A&B's 2,550 unit Waiale project), the one that will have the greatest impact on the proposed Wailuku Apt project, and vice versa will be affected by this Wailuku Apartment project.*

Response:

The proposed Wailuku Apartment Rental Housing Project is anticipated to be completed and occupied by the year 2021. The context for project need recognizes that other development projects are ongoing, including new housing developments in Kehalani and Maui Lani. Other development proposals, including A&B's Waiale project, or other proposed projects within the Central Maui region, will contribute to meeting the island's housing needs. Collectively, in today's market, all projects, whether they be in Central Maui, South Maui, or West Maui, are considered complementary to addressing the housing shortage. Legacy Wailuku LLC does not view housing proposals in other locations of the island as being competitively detracting from the goal of providing housing to local families. We believe that all providers of new housing inventory join us in our goal of improving life quality on Maui.

Comment No. 14:

Water: *The Draft-EA PDF Pages 44 + 45 and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPO and 240,000 gallons for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with sizeable affordable units)?*

Response:

Legacy Wailuku LLC is working with the Department of Water Supply (DWS) to ensure that sufficient water source will be available to serve the project, while ensuring that other affordable

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projects will have the same opportunity to access water in accordance with Maui County Code Section 14-12. We note that Legacy Wailuku LLC views the provision of affordable housing as a significant public benefit, irrespective of who is able to meet this need. We support other providers of affordable housing and understand that each provider will have the same benefits provided by law with respect to water source availability.

Comment No. 15:

Parking: *The original draft contained only 486 parking stalls. This DEA has over 600. How was this change made? Have all the stalls been reduced in width/size? Will there be adequate parking space for pick-ups and larger vehicles? Special visitor parking?*
Handicapped parking?

Response:

Additional code compliant parking, from 486 stalls (original draft) to 661 stalls, was provided by making site plan adjustments and providing the allowable number of tandem stalls. All stalls are standard size 8'-6" x 18'. Loading spaces are provided and ADA accessible stalls are provided. In compliance with Maui County Code, there are 488 full size stalls, 163 full size tandem stalls, 8 accessible stalls and 2 stalls that are van accessible

Comment No. 16:

300 foot+ driveway, cul-du-sac: *Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night with 600+ cars, firetrucks will not be able to access all buildings because they cannot turn around, or even safely back-up. The DEA claims this safety danger is mitigated by sprinklers in the apartments, but this safety hazard by itself is a severe impact requiring a full EIS under the law.*

Response:

As part of the process of vetting the proposed project exemptions, Legacy Wailuku LLC has received preliminary comments from the County's Department of Fire and Public Safety. At present time, an exemption to Maui County Code, 16.04C, Fire Code will not be requested. The design team has met and will continue to meet with the Department of Fire and Public Safety during the early stages of preparing construction documents to address their concerns on fire protection, vehicular access, and to identify viable solutions for fire truck turnarounds.

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Comment No. 17:

Project Management: *Will the County ever have any responsibilities if Legacy goes out of business? (Repairs? Ownership? Management? Utilities? Insurance? etc.) Who will manage the property? Establish homeowner association fees?*
These impacts are simply ignored.

Response:

This project is privately financed without direct government subsidies. Therefore, if Legacy Wailuku LLC does go out of business then the lender and investors will take over ownership and management of the project. This would be subject to a Declaration of Land Use Restrictive Covenants to be recorded on the fee simple title of the property to ensure that affordability requirements are maintained pursuant to the 201H approval process. Legacy Partners and Pier Investments have a proven and strong track record that provides assurance that a reputable developer is managing this project. Legacy Wailuku LLC is also the management company responsible for insurance, utilities, repairs, etc. There are no homeowner association fees for this project.

These questions would be applicable for projects that use public funding to finance their projects. But again, as noted above, we are privately financed.

Comment No. 18:

Long-Term: *After the 30 years what will happen? Will renters ever have the right to purchase? Will rents suddenly rise?*

Response:

After the 30-year deed restriction expires, Legacy Wailuku LLC could renew their affordability commitment. Legacy Wailuku LLC could also offer the units for purchase, but such an alternative would require further coordination with the County of Maui. We are committed to providing tenants a "safety net" for housing. Any sudden increase in rents is contrary to our commitment to maintaining that "safety net".

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

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Should you have any questions regarding our responses, please feel free to contact me at email lindaschatz@schatzcollaborative.com or by phone at (808) 428-8717.

Very truly yours,

Linda Schatz

LS

cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Ben Lee, Clifford Planning & Architecture
Darren Unemori, Warren S. Unemori Engineering, Inc.
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Erin Mukai, Munekiyo Hiraga
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EXHIBIT H

MAY 21 2018

From: Reid Kawabata
Sent: Monday, May 21, 2018 11:00:42 AM (UTC-10:00) Hawaii
To: Colleen Suyama
Subject: Response to Legacy Partners Environmental Assessment

Subject: Legacy Partners

Thank you once again for giving our community the opportunity to comment on Legacy Partners proposed rental project in Waikapu. After discussing this project with our Board Members last Monday we as a group decided to write separate comments. One thing that we all agree on is that this is a decent project if a little more affordable units could be added in for local families, adding even more parking, lowering the building heights, better planning for safety of our children and kupuna walking to schools or the shops in the area and a better traffic study, Please! Because no one will ever believe that from this project (2.5 cars x 324 units = 810 cars) only 22 cars will be added to the Morning peak traffic. Maybe even widen Waiale Rd In front of your project. Through these past years we have had about a dozen developers come through our community asking for approval to build within our boundaries and of these only two projects that kind of split the community apart. And with these two projects it just boiled down to the same concern, location location location. So please, we do need and want affordable units for local families however let's not ruin existing communities just for the sake of building. As for developers that wish to buy bigger properties be smart and talk with the communities before purchasing any land and not just listen to people that just tell you what you want to hear. And should you consider moving forward I'd recommend doing a full EIS with more studies.

Thank you,
Reid Kawabata
President Waikapu Community Association
Sent from my

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June 28, 2018

Mr. Reid Kawabata, President
Waikapu Community Association
P.O. Box 3046
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2) 3-5-001:064

Dear Mr. Kawabata:

Thank you for your email of May 21, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We offer responses to your concerns as follows.

Comment:

One thing that we all agree on is that this is a decent project if a little more affordable units could be added in for local families, adding even more parking, lowering the building heights, better planning for safety of our children and kupuna walking to schools or the shops in the area and a better traffic study, Please! Because no one will ever believe that from this project (2.5 cars x 324 units = 810 cars) only 22 cars will be added to the Morning peak traffic. Maybe even widen Waiale Rd In front of your project. Through these past years we have had about a dozen developers come through our community asking for approval to build within our boundaries and of these only two projects that kind of split the community apart. And with these two projects it just boiled down to the same concern, location location location. So please, we do need and want affordable units for local families however let's not ruin existing communities just for the sake of building. As for developers that wish to buy bigger properties be smart and talk with the communities before purchasing any land and not just listen to people that just tell you what you want to hear. And should you consider moving forward, I'd recommend doing a full EIS with more studies.

Response:

We understand the concerns of the Waikapu Community Association as it relates to the number of affordable units, parking, building heights and safety for our children and kupuna, and traffic. The project site and development parameters have been updated, as reflected in the March 2018 Draft Environmental Assessment (EA). Based on information presented in the Draft EA, we note the following:

- The opportunity to provide as many affordable rental units as possible has been the subject of various feasibility analyses undertaken by Legacy Wailuku, LLC, as we understand the great need for housing which faces the Maui community. At the same time, though, we

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seek to accomplish this objective without government subsidy. We believe that the provision of 195 affordable rental units to those falling within the Area Median Income range of 80% to 140% will help meet the needs of Maui's workforce families.

- We have increased parking counts to provide for two (2) parking stalls per unit, as required by Maui County Code.

- The view analysis provided as **Appendix "F"** of the Draft EA seeks to ensure that view corridors to Kahului Harbor and Haleakala will be maintained. While the civil engineer has explored opportunities for over excavating to establish lower finished floor elevations, this scenario would present challenges for project site drainage, while adding overall construction costs to the project. As noted above, the project is unique as a privately funded affordable rental project (i.e., no government subsidies), and the ability to provide affordable rental units to local families in the context of constructability and cost management is an important consideration.

- We have added sidewalks along Kuikahi Drive and Waiale Road as part of project-related improvements. These sidewalks will provide connectivity to neighboring sidewalks to enable continuous use of sidewalks to access shopping, recreation and public transit facilities. The sidewalk along Kuikahi Drive will be set back from the Kuikahi Drive travelway by 10 feet, while the sidewalk along Waiale Drive will be set back from the Waiale Drive travelway by 9 feet to 15 feet

- We recognize that the number of vehicles per household may vary. However, as an affordable apartment rental project with 27 studio units and 108 one (1) bedroom units, the maximum average number of vehicles we anticipate per household is two (2).

- With respect to trip generation during the morning peak hour, the Traffic Impact Analysis Report (TIAR) utilizes the Trip Generation Manual, 10th Edition to estimate trip generation. The morning peak hour trips estimated by the TIAR, as cited on page 27 of the report, is 139 vehicles (36 entering and 103 exiting).

- Waiale Road will be widened along a portion of the project's frontage to provide for a 12-foot travelway in both directions, as well as a 6-foot bike lane. Adjacent to the bike lane, a grassed drainage swale will be provided, as well as the 6-foot sidewalk beyond.

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- We appreciate comments provided by our neighboring communities and look forward to continuing dialogue on the various matters raised by the Waikapu Community Association through the Section 201H approval process.

- With respect to the preparation of a Chapter 343, HRS, Environmental Impact Statement (EIS), the project's technical characteristics and related impact considerations were thoroughly evaluated. In accordance with Hawaii Administrative Rules, Section 11-200-12, Significance Criteria, every phase of the 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 were considered. The analysis contained in the Draft EA was supported through in-depth technical studies that were prepared by qualified professionals, and which were then reviewed by agencies having jurisdiction and expertise in their respective fields of authority. Each section of the Draft EA included a discussion and analysis of the impacts related to the respective environmental, infrastructural, public service and socio-economic parameters. The assessment of each significance criteria set forth in Section 11-200-12 is included as Chapter X of the Draft EA. This chapter will be carried forward to the Final EA. With this in mind, we are looking forward to the conclusion of the Chapter 343, HRS process through the Hawaii Housing Finance and Development Corporation's issuance of a Finding of No Significant Impact or FONSI.

Thank you again for commenting on the Draft EA. A copy of your email and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me at email lindaschatz@schatzcollaborative.com or at telephone (808) 428-8717.

Sincerely,

Linda Schatz

LS:
cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Ben Lee, Clifford Planning & Architecture
Darren Unemori, Warren S. Unemori Engineering, Inc.
Erin Mukai, Munekiyo Hiraga
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May 15, 2018

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

RE: Wailuku Apartment Rental Housing Project - Request for Comment

Dear Ms. Suyama:

The Waikapu Gardens Homeowners Association appreciates this opportunity to give feedback on the Draft Environmental Assessment for the proposed Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC.

After review of the updated Draft Environmental Assessment, we would like to submit the following comments for review and consideration.

1. **Location:**
   As mentioned in our previous response, this project is located at the corner of a very busy intersection and will add a dense population of residents to an already congested and busy junction. This will create problems for residents living at this proposed project as well as for residents who live in the nearby communities of Waikapu, Wailuku and Kahului, who use this area as a commuter route.

2. **Traffic:**
   This continues to be one of the major concerns regarding the location of this project. The project is being proposed at the intersections of Kuikahi Drive, Maui Lani Parkway and Waiale Road. This intersection is gridlocked with traffic during the peak morning hours from about 7.30 am to 8:00 am. with commuters dropping their children off at school and going to work. Traffic is backed up on all of these streets. Again, adding another 324 housing units will add more congestion to this intersection creating a potentially dangerous situation.

3. **Sidewalks and pedestrian parking:**
   At the 3/12/18 meeting of the Waikapu Community Association, a representative from the project mentioned having "at grade sidewalks" on Waiale Road fronting the project. Considering the residents that will be living at this project and the proximity to nearby shopping, schools and recreational facilities, it would be highly recommended to install concrete curbed sidewalks on Waiale Road which will provide a safer path route for pedestrians.

Taking the above into consideration, we would suggest scaling back the project to 9 "two story" buildings. This will help lessen the density of population at the proposed site, provide affordable rentals, and help save the corridor views in that area; which is in line with the statement of values for our Waikapu Community Association.

Thank you for allowing us this opportunity to provide feedback on the Wailuku Apartment Rental project.

Sincerely,
Waikapu Gardens Homeowners Association
P.O. Box 2390
Wailuku, HI 96793

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June 28, 2018

Waikapu Gardens Homeowners Association
P.O. Box 2390
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2) 3-5-001:064

Dear Sir or Madam:

Thank you for your letter of May 15, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We have summarized your comments and offer responses to your concerns relating to project location, traffic, sidewalks and pedestrian parking.

Comment Regarding Location:

As mentioned in our previous response, this project is located at the corner of a very busy intersection and will add a dense population of residents to an already congested and busy junction. This will create problems for residents living at this proposed project as well as for residents who live in the nearby communities of Waikapu, Wailuku and Kahului, who use this area as a commuter route.

Response:

We believe that the value of this location for affordable housing is its proximity to existing infrastructure and services (e.g., bus service, educational and recreational facilities, shopping areas, etc.). An intentional strategy to relieve congestion is to develop in proximity to existing infrastructure and services. This creates compact developments that provide families the opportunity to walk to these services without having to use their cars. From a project development standpoint, the location is highly supportive of the affordability objectives of the project. This is a key consideration to the community's success in providing workforce housing for local residents. The site is also located within the Urban Growth Boundary of the County's Maui Island Plan (MIP). The MIP, which was developed by the County of Maui with the input of the community, provides direction for future growth on the island and identifies areas deemed appropriate for future urbanization. With respect to the proposed project, we anticipate that many of the project's prospective tenants will be local families who support our community in various career fields, and who need housing in a tight residential market which has seen rental and sales price levels exceed the reach of so many.

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Comment Regarding Traffic:

This continues to be one of the major concerns regarding the location of this project. The project is being proposed at the intersections of Kuikahi Drive, Maui Lani Parkway and Waiale Road. This intersection is gridlocked with traffic during the peak morning hours from about 7.30 am to 8:00 am. with commuters dropping their children off at school and going to work. Traffic is backed up on all of these streets. Again, adding another 324 housing units will add more congestion to this intersection creating a potentially dangerous situation.

Response:

We share your concerns regarding traffic and have studied the issue thoroughly to consider all elements of mitigation which will ensure that the safety and convenience of the traveling public, including project residents, are not adversely affected. The project's Traffic Impact Analysis Report (TIAR) **(Appendix "H"** of the Draft EA) has evaluated conditions during both morning and afternoon peak hours. The TIAR identifies the northbound traffic congestion which occurs along Waiale Road for about a 30-minute period, that can back up from Kaohu Street to Kuikahi Drive during the morning peak hour of traffic. Traffic generally flows well during the remaining off-peak periods of the day. Intersection improvements have been identified and planned for by the County at the Waiale Road/Waiinu Road intersection, however this improvement is currently on hold due to various constraints. Our TIAR identifies additional regional mitigation measures along Waiale Road that will be discussed with the County for future planning purposes and could include modified traffic control options at the Waiale Road/Kaohu Street 4-way stop intersection and median refuge lanes along Waiale Road to help side street vehicles get onto Waiale Road during congested times. Other project-related roadway improvements as identified in the TIAR and the project's Preliminary Engineering Report will be implemented to support traffic flow to the maximum extent practicable. We also note that the proposed project may provide new housing opportunities for some of the families that may have students in the nearby school or for those working nearby in Wailuku. This provides an option for some of those driving commuters to move to the new project and more easily travel to work and/or school without necessarily having to drive due to the close proximity of the project to school and work. Bus, bike, and walk options may become more viable.

Please be assured that we will be a strong and supportive voice in working with nearby communities and State and County agencies to advance regional traffic solutions which will benefit the entire community.

Comment Regarding Sidewalks and Pedestrian Parking:

At the 3/12/18 meeting of the Waikapu Community Association, a representative from the project mentioned having "at grade sidewalks" on Waiale Road fronting the project. Considering the

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residents that will be living at this project and the proximity to nearby shopping, schools and recreational facilities, it would be highly recommended to install concrete curbed sidewalks on Waiale Road which will provide a safer path route for pedestrians.

Response:

Safe pedestrian routes to nearby schools and business is a shared concern. Keeping the location of the project in mind, we will be constructing paved sidewalks with asphalt curbing and bike lanes along both Waiale Road and Kuikahi Drive to ensure that safe, all-weather pedestrian routes exist between the apartment complex and the nearby Pu'u Kukui Elementary School; Kehalani Village Center shopping area; Walgreens drug store; the County bus stop in front of Ka Hale A Ke Ola; and businesses in the Maui Lani Village Center. See attached **Exhibit "A".**

We are proposing to take the more environmentally responsible approach of using grassed swales, rather than concrete gutters, to collect pavement runoff. Importantly, this "green street" configuration will offer greater horizontal separation between the sidewalk and the vehicle travelway. Along Kuikahi Drive there will be a 10-ft. horizontal separation between the travelway and the concrete sidewalk. Along Waiale Road, there will be a 9-ft. to 15-ft. horizontal separation. We believe that this horizontal separation combined with the limited speed limits on Kuikahi Drive and Waiale Road will provide for the safety of both project and community residents.

We note that the sidewalk will be of either concrete or asphaltic construction. Our engineer has determined that either paving material will perform reliably as a sidewalk and provide the safe, all-weather, ADA compliant walking surface that will support the community's walkability objectives.

Comment Regarding Scaling Back the Project:

Taking the above into consideration, we would suggest scaling back the project to 9 "two story" buildings. This will help lessen the density of population at the proposed site, provide affordable rentals, and help save the corridor views in that area; which is line with the statement of values for our Waikapu Community Association."

Response:

The Central Maui Rental Market Study completed for the project notes the need for more affordable rental units and acknowledges that the rental demand will be from local workforce families. The proposed Wailuku Apartment Rental Housing Project is not a large scale master planned community, but a 324-unit project with a distribution of 60 percent affordable and 40 percent market. Scaling back the project and reducing the number of units by limiting the project

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to nine (9) two-story buildings would make this privately funded project infeasible.

Thank you again for providing comments on the Draft Environmental Assessment (EA). A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at lindaschatz@schatzcollaborative.com or by phone at (808) 428-8717.

Sincerely,

Linda Schatz

LS:
cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Darren Unemori, Warren S. Unemori Engineering, Inc.
Erin Mukai, Munekiyo Hiraga
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EXHIBIT A.

Typical Street Sections, Kuikahi Drive and Waiale Road

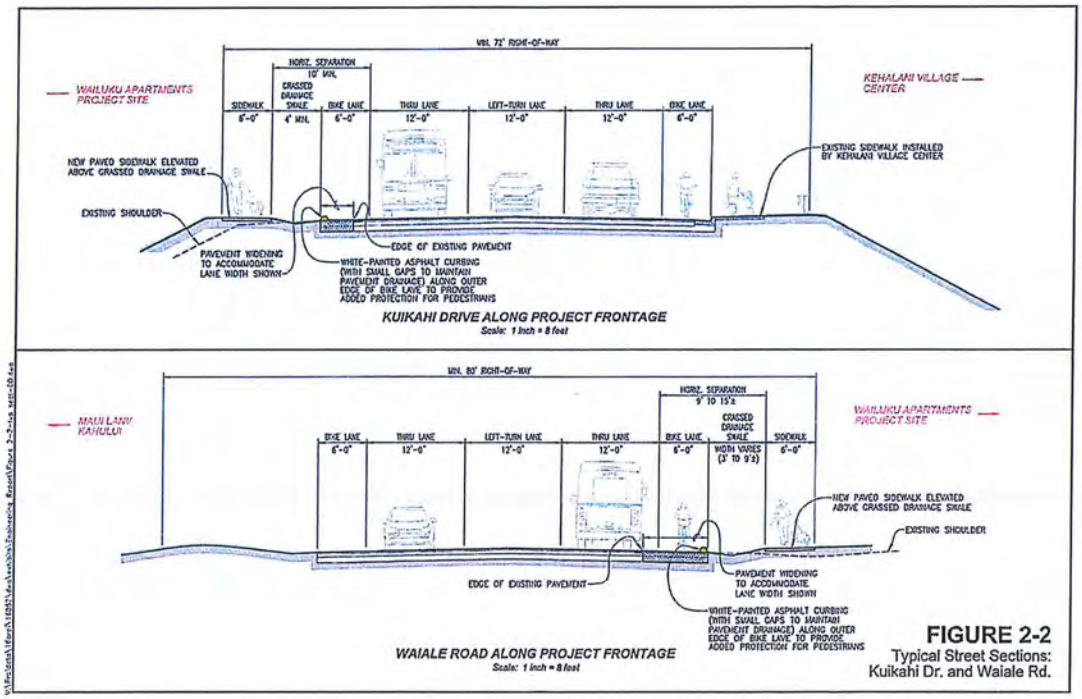


FIGURE 2-2
Typical Street Sections:
Kuikahi Dr. and Waiale Rd.



MAY 17 2018

Date

Ms. Colleen Suyama
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Re: Wailuku Heights Extension - Unit II Homeowners Association ("HOA") Comments On Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key (2)3-5-001:64

Dear Ms. Suyama,

Wailuku Heights Extension - Unit II Homeowners Association ("HOA") is concerned about the traffic impact that would be caused by the proposed Wailuku Apartment Rental Housing Project at Tax Map Key (2)3-5-001:64 ("Project").

The HOA believes the solution for relieving Project caused traffic congestion proposed by the traffic study in the draft Environmental Assessment ("Draft EA") is inadequate. The traffic study authored by Austin Tsutsumi & Associates states that traffic will continue to operate at "over-capacity" and that traffic will "worsen" along the major roads in the area. The suggested method of relieving traffic congestion is to "encourage transportation demand management measures, such as programs that promote the use of transit, walking, biking, and alternative modes of transportation...". The HOA thinks this solution is inadequate and impractical.

While promoting alternative transportation is an admirable proposal, the HOA believes it would be more meaningful to require the Project, and other projects, to make a monetary contribution towards the maintenance and improvement of the County and State road infrastructure. The Draft EA study acknowledges portions of the County and State infrastructure are already "over-capacity". Adding a concentration of over 600 cars can only cause additional overload. Just as Maui Lani has been required to contribute $610,000 towards the Maui Lani-Kamemeha intersection, the HOA suggests that one condition of approving the Project is to assess a charge to this and future developments in order help share the financial burden of improving our inadequate road infrastructure.

Sincerely,

Wailuku Heights Extension – Unit II Homeowners Association
Board of Directors

EXHIBIT H

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June 28, 2018
Wailuku Heights Extension Unit II Homeowners Association
Board of Directors
c/o Hawaiiana Management Company, Ltd.
140 Hoohana Street, Suite 208
Kahului, Hawai'i 96732

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2) 3-5-001:064

Dear Sir or Madam:

Thank you for your letter received on May 17, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We have restated your comments below and offer responses to your concerns relating to traffic.

Comment No. 1:

The HOA believes the solution for relieving Project caused traffic congestion proposed by the traffic study in the draft Environmental Assessment ("Draft EA") is inadequate. The traffic study authored by Austin Tsutsumi & Associates states that traffic will continue to operate at "over-capacity" and that traffic will "worsen" along the major roads in the area. The suggested method of relieving traffic congestion is to "encourage transportation demand management measures, such as programs that promote the use of transit, walking, biking, and alternative modes of transportation ... ". The HOA thinks this solution is inadequate and impractical.

Response:

The Traffic Impact Analysis Report (TIAR), presented as **Appendix "H"** of the Draft Environmental Assessment (EA), acknowledges specific traffic congestion issues with specific movements at the Honoapi'ilani Highway/Kehalani Parkway intersection, Kuikahi Drive/Kehalani Village Center Driveway intersection, Waiale Road/Waiinu Road intersection and the Kaohu Street/Waiale Road intersection. These conditions will continue with or without the project. In this regard, we agree that transportation management may be one possible partial solution, but is not considered adequate to fully address the existing traffic problems in the project vicinity. See additional response below.

Comment No. 2:

While promoting alternative transportation is an admirable proposal, the HOA believes it would be more meaningful to require the Project, and other projects, to make a monetary contribution towards the maintenance and improvement of the County and State road infrastructure. The Draft EA study acknowledges portions of the County and State infrastructure are already "over-

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capacity". Adding a concentration of over 600 cars can only cause additional overload. Just as Maui Lani has been required to contribute $610,000 towards the Maui Lani-Kamemeha intersection, the HOA suggests that one condition of approving the Project is to assess a charge to this and future developments in order help share the financial burden of improving our inadequate road infrastructure.

Response:

The project's TIAR has identified specific roadway and related traffic improvements to be made by Legacy Wailuku LLC. See Page 43, of the TIAR.

The TIAR also evaluated congestion conditions during both morning and afternoon peak hours. Issues which are of specific concern as it relates to the proposed Wailuku Apartment Rental Housing Project include the northbound traffic congestion that occurs along Waiale Road for about a 30 minute period, that can back up from Kaohu Street to Kuikahi Drive during the morning peak hour of traffic. Traffic generally flows well during the remaining off-peak periods of the day. Intersection improvements have been identified and planned for by the County at the Waiale Road/Waiinu Road intersection, however this improvement is currently on hold due to various constraints. The TIAR identifies additional regional mitigation measures along Waiale Road that will be discussed with the County for future planning purposes and could include modified traffic control options at the Waiale Road/Kaohu Street 4-way stop intersection and median refuge lanes along Waiale Road to help side street vehicles to get onto Waiale Road during congested times.

Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help implement the regional traffic improvements cited above. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income.

We look forward to continuing dialogue on traffic matters through the Section 201H approval process, and therefore appreciate receiving your comments. A copy of your letter and this response letter will be included in the Final EA.

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Should you have any questions regarding our responses, please feel free to contact me by email at lindaschatz@schatzcollaborative.com or by phone at (808) 428-8717.

Sincerely,

Linda Schatz

LS:
cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Erin Mukai, Munekiyo Hiraga
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To: **Mr. Ken Takahashi,** (808) 587-0547, ken.t.takahashi@hawaii.gov
Hawai'i Housing Finance Development Corporation (HHFDC)
677 Queen Street, Room 300, Honolulu, HI 96813
To: **Mr. Michael Munekiyo**, AICP, (808) 244-2015, planning@munekiyohiraga.com
Munekiyo Hiraga; 305 High Street, Suite 104, Wailuku, Hawaii 96793
To: **Ms. Linda Schatz** (808) 428-8717 lindaschatz@schatzcollaboratve.com
Legacy Wailuku, LLC; 114 Olomana Lane, Honolulu, Hawaii 96813
To: **Mr. Vince Bagoyo** 808-357-3842 vbagoyo-devgroup@hawaii.rr.com
V. Bagoyo Development Consulting Group, LLC 1500 Kilinoe Pl., Wailuku, HI 96793

From: Richard "Dick" Mayer dickmayer@earthlink.net
1111 Lower Kimo Dr. Kula, Maui HI 96790

May 8, 2018

RE: **REVISED Wailuku Apartment Rental Housing Project DEA (AFNSI)**

Since much of the material in this revised draft EA is similar to the original draft EA, and because the response comments by Bagoyo Development Consulting Group did not adequately respond to my original comments, I am having to resubmit parts of my original October-2017 letter with some supplementary material.

Fortunately, in several respects this revised EA has improved upon the original DEA document. I will try to cite those areas which have been improved.

SUMMARY Multiple affordable housing projects are needed on Maui, ones that will meet our local residents' housing needs. HOWEVER, this project includes:
- too many market units resulting in a very crowded project with undesirable impacts;
- far too many 201-h exemptions that will cost the community dearly; and
- several severe impacts (some disclosed and others not described) that
➔ NECESSITATE A COMPLETE EIS, (not just an EA with a FONSI).

In view of the impacts and information deficiencies noted in the existing DEA, and the fact that the impacts of the project are significant, as defined by HAR 11-200-12, (See Appendix A below) an Environmental Impact Statement is required instead of an Environmental Assessment.
Specifically, the DEA does not adequately address:

- **Cumulative impacts of traffic from new developments and roads**
- **Cumulative impacts on over-capacity schools**
- **Secondary impacts on other developments resulting from this project's water use**
- **Cumulative impacts on Central Maui's sewage capacity**
- **Cumulative impacts by housing off-shore residents instead of providing for local residents' needs**

Specific comments on the Wailuku Apartment Rental Housing Project D-EA (AFNSI):

1. **Full EIS**: This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do 731

exist, a full Environmental Impact Statement (EIS) should be required by the Hawai'i Housing Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project. **A "Full EIS" is needed and should be required to examine the many significant cumulative and secondary impacts and how they will be mitigated.**

2. **Implementation**: This REVISED Housing Project DEA mentions numerous impacts (intersections at "F levels", schools already beyond capacity, distance from parks with no safe routes, distant bus stops, etc.) indicates some possible mitigating solutions, **but does not promise to implement the needed mitigations.**

3. **Exemptions**: As stated on Draft-EA Page 5, the Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes.

The document includes an absurdly high number of major exemptions (18 pages listed on D-EA pages 208-213, and in more detail on PDF Pages 1147-1158) that are being requested. The very fact that these 18 pages of exemptions (the most we have yet to see) are included may be a hint that there are numerous significant impacts that the applicant wishes to not disclose. **Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, etc. MUST be discussed and mitigated. They are not.**

4. **Traffic**: The Draft-EA's major omissions relate to traffic (PDF 55-73 + Appendix H).

4.A The Draft-EA TIAR traffic analysis has selectively underestimated the future impacts from several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center.

Both of these projects have already received initial entitlements, and it is likely that they will soon be impacting this 201-h affordable apartment project's traffic in a very significant manner. Similarly, this Wailuku Apartment Rental Housing will be impacting the traffic of those projects. **A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts.** Those other projects in their full EIS have already-approved environmental documents with comprehensive TIAR information, but they did not include this Wailuku Apartment Rental Housing in their TIAR analysis.

4.B In addition to not completely considering the planned growth of nearby projects, the DEA has not considered the effects of new highways that will affect the flows of traffic. For example, if the Waiale Road is extended southward to Honopiilani Hwy. there will be a great increase on all of the intersections on Waiale Road, especially those near this project. (See PDF 933:

The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, since they are unlikely to be built

by Year 2021 given their current status, **these roadway improvements were not included in this TIAR.**

They should have been included, and a full EIS would discuss these projects.

Since there is a total potential of: {Waikapu (1,440) +adjacent Waiale Road projects (146) + A&B Waiale (2,550) + Maui Lani (935) + Kehalani (956) + this Wailuku Apt. project (324)} = **6,351 units in this already congested area,** the cumulative future traffic being generated from these five nearby projects could significantly affect the already very limited roads in the area, I request that the HHFDC and the Maui Planning Organization (MPO) require:

i) that, along with the other developers, Wailuku Apartment Rental Housing Project be **required to provide a "fair share" of the cost of: a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems**; and

ii) that, along with the other major developments, Wailuku Apartment Rental Housing project be **required to pay its "fair share" to upgrade the highways, roads and intersections in this area**.

4.C Even though this project will not be completed until 2021, the TIAR has used 2021 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

5. **Housing Unit Numbers**: Draft-EA Page 16: Although this project is being described as a 201-h affordable housing rental project, in fact **only 110 out of 324 units (only 34% of the units) are for those under 100% of Maui's median income (the AMI).** In other words, 214 units (the vast majority) are for those **over** the median Maui family income, either as 190 market units or 24 higher rent affordables.

This is hardly an affordable housing project if over half the people in Maui would be unable to afford to even rent a unit in the project. A condition should we put on this project to require at least half of all the units to be available to those who are earning less than 100% of the average family income.

With regard to the number of available units, and especially the number of available affordable units, there are inconsistencies in the Draft-EA.
For example: It clearly states on PDF page 25 that the affordable units will be rented out only to those between 80% and 140%. However, on the immediately preceding page in table 2 it indicates that there will be 55 units rented out to those between 51 to 80%. So what is the commitment?

Another example: throughout the draft EA it is stated that they will be 324 total units. However, in the table on PDF page 906, a total of 301 units is used.

6. **Off-Shore Residents:** Why is this project counting on demand from off-shore residents when there is such a great need for local residents.

See pages Draft-EA PDF page 881 for discussion of this.

> "The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to **offshore demand** in a significant way - significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a **3-month lease period** is important, as that can take advantage of seasonal demand - meaning the winter and the summer 'high' periods."

And on Draft-EA PDF page 885:

> **"A good part of the demand for these units - especially studios, we believe - would be from offshore renters coming into the market to enjoy a 3-4 month stay** - using these units as a substitute for hotel rooms."

And on Draft-EA PDF page 900:

> "We expect that Maui's visitor industry will continue to enjoy success and thereby **cultivate amongst a portion of the shortterm visitors a desire to lengthen their stay the following trip by renting a unit for 3 months, the minimum period for this project.** We expect the demand here coming out of Canada and the northern states of the US."

And on Draft-EA PDF page 901:

> "We see all sources of demand being present and accounted for . . . Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility. **We suggest there be a healthy mix, as the local presence will make project more attractive to the offshore rental demand."**
> the US."

And on Draft-EA PDF page 905:

> **There will be additional demand from offshore renters.** It may be likely that **offshore demand might even be as high as a quarter or a third of the units**. A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that **there is an apparent offshore demand for these types of units**.

And finally on Draft-EA PDF page 906:

> PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bed room unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bed room unit, as that has the deepest demographic, as an affordable unit. **Plus, we expect very good offshore demand for a small unit, such as this.**
>
> Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families. **We also see a**

good potential demand for renting them out on the minimum lease of 3 months to offshore visitors, grandparents who will cycle their grandchildren through the unit over the summer or winter months.

7. **Population**: The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. **In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.**

8. **Schools** which will service the Wailuku Apartment Rental Housing Project's many families, are all significantly **over capacity NOW**.

> **"Pu'u Kukui Elementary School** is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years. **Maui Waena Intermediate School** is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years. **Maui High School** is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years." (Draft-EA PDF page 53)

The small school impact fee to be paid to the State (far less than $1 million) will not begin to satisfy the DOE's ability to build the additional classrooms or improve the schools' capacities. South Maui cannot even gets its high school built.

9. **Finances**: Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Apartment Rental Housing project. They have already received several entitlements without trying to get any 201-h exemptions.

10. **Play Areas and Parks**: The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great.
Among the 1,000 residents there will be many toddlers who will be able to use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). The greater impact will fall on the 100+ children of school age. These children will need to get to parks and playing fields along streets lacking bicycle routes and with minimum sidewalks and by crossing several very busy and dangerous high traffic avenues.
The so called "swimming pool" appears to be merely a small wading pool, totally insufficient for 1,000 residents.

11. **Solid Waste**: The Draft-EA on page 34 mentions a private company being responsible for Solid Waste disposal. "Solid waste collection services for the project will be provided by a

privately managed company and disposed at Maui County's Central Maui Landfill." Who will be required to pay for this company? Residents in affordable units?

The Draft-EA does not show any locations for solid waste disposal / trash bins. There will be many of these for 324 units. Nor does it seem that big rubbish trucks will be able to turn around at the end of the 300'+ driveway. Backing up early in the morning will be a noisy disturbance. The response to this statement in my previous letter was incomplete and inadequate, only that the developer would look into it. However, that did not happen.

12. **Pedestrian Safety**: This revised DEA has many improved safety features for pedestrians: sidewalks on Kuikahi and a cross-walk from the project to Foodland and Longs.

Unfortunately, there is only a partial sidewalk along Waiale Road. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. To get to the nearby stores they will need a complete sidewalk along Waiale and it should be provided south of the Waiale Road exit/entrance. Because the project can gain 201-h approval only if "the proposed housing project is consistent with the purpose and intent of Section 201H-38, HRS, and **the project's design meets all health and life safety requirements per the building code and Maui County Code**."

13. **A&B's 2,550 unit Waiale project:** Maps on PDF pages 18 +35 and throughout the DEA do not show the major project to the South and to the East. The map and text should include the largest project (A&B's 2,550 unit Waiale project), the one that will have the greatest impact on the proposed Wailuku Apt project, and vice verso will be affected by the Wailuku Apt't project.

14. **Water:** The Draft-EA PDF Pages 44 + 45 and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gallons for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with sizeable affordable units)?

15. **Parking**: The original draft contained only 486 parking stalls. This DEA has over 600. How was this change made? Have all the stalls been reduced in width/size? Will there be adequate parking space for pick-ups and larger vehicles? Special visitor parking? Handicapped parking?

16. **300 foot+ driveway, cul-du-sac**: Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night with 600+ cars, will firetrucks be able to access all buildings and be able to turn around, or even safely back-up?

17. **Project Management**: Will the County ever have any responsibilities if Legacy goes out of business? (Repairs? Ownership? Management? Utilities? Insurance? etc.)
Who will manage the property? Establish homeowner association fees?
The impacts have yet to be discussed.

18. **Long-Term:** After the 30 years what will happen? Will renters ever have the right to purchase? Will rents suddenly rise?

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SUMMARY Multiple affordable housing projects are needed on Maui, ones that will meet our local residents' housing needs. HOWEVER, this project includes:
-- too many market units resulting in a very crowded project with many impacts;
-- far too many 201-h exemptions that will cost the community dearly; and
-- several severe impacts (some disclosed and others not described) that necessitate a complete EIS, (not just an EA with a FONSI).

WARNING: Because there are so many actual impacts from this proposed project, it is likely that someone will sue the applicant and/or approving authority if the FONSI is granted and a full EIS is not required.

Mahalo for allowing me the opportunity to share my comments on the Draft-EA and to make my concerns known,

Richard D. Mayer

CC Maui County Councilmember Stacey Crivello, Chair, Housing Committee
Maui County Councilmember Kelly King, Chair, Planning Committee
Maui County Councilmember Alika Atay, Wailuku Residency Councilmember
Director Carl Reimann, Maui County Housing and Human Affairs Department
Director Will Spence, Maui County Planning Department

Appendix A

HAR §11-200-12 Significance criteria.

(a) In considering the significance of potential environmental effects, agencies shall consider the sum of effects on the quality of the environment, and **shall evaluate the overall and cumulative effects** of an action.

(b) 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**. In most instances, an action shall be determined to have a significant effect on the environment if it:

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;
2. Curtails the range of beneficial uses of the environment;
3. Conflicts with the state's long-term environmental policies, or goals, or/and guidelines as expressed in chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;
4. Substantially affects the economic welfare, or social welfare, and cultural practices of the community or State;
5. Substantially affects public health;
6. Involves substantial secondary impacts, such as population changes or effects on public facilities;
7. Involves a substantial degradation of environmental quality;
8. Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;
9. Substantially affects a rare, threatened, or endangered species, or its habitat;
10. Detrimentally affects air or water quality or ambient noise levels;
11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;
12. Substantially affects scenic vistas and view planes identified in county or state plans or studies; or,
13. Requires substantial energy consumption.

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June 28, 2018

Richard "Dick" Mayer
1111 Lower Kimo Drive
Kula, Maui, Hawaii 96790

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Mayer:

Thank you for your letter of May 8, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We have restated your comments in the order presented in your letter and have provided responses to each, as follows:

Comment No. 1:

Full EIS: *This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do exist, a full Environmental Impact Statement (EIS) should be required by the Hawai'i Housing Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project.* ***A "Full EIS" is needed and should be required to examine the many significant cumulative and secondary impacts and how they will be mitigated.***

Response:

The project's technical characteristics and related impact considerations were thoroughly evaluated by Applicant, Legacy Wailuku LLC and Approving Agency, Hawaii Housing Finance & Development Corporation (HHFDC). In accordance with Hawaii Administrative Rules (HAR), Section 11-200-12, Significance Criteria, every phase of the 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 were considered. The analysis contained in the Draft Environmental Assessment (EA) was supported through in-depth technical studies that were prepared by qualified professionals, and which were then reviewed by agencies having jurisdiction and expertise in their respective fields of authority. Each section of the Draft EA included a discussion and analysis of the impacts related to the respective environmental, infrastructural, public service and socio-economic parameters. The assessment of each significance criteria set forth in Section 11-200-12, HAR is included as Chapter X of the Draft EA. This chapter will be carried forward to the Final EA. The need for a full Environmental Impact Statement (EIS) is not deemed warranted in the context of the level of impacts, analysis and mitigation measures documented in the Draft EA.

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***Comment No. 2*:**

Implementation: *This REVISED Housing Project DEA mentions numerous impacts (intersections at "F levels", schools already beyond capacity, distance from parks with no safe routes, distant bus stops, etc.) indicates some possible mitigating solutions,* ***but does not promise to implement the needed mitigations.***

***Response*:**

Where mitigation measures are required due to potential impacts attributed to the project, Legacy Wailuku LLC will implement those applicable measures, including measures to address impacts related to traffic, access to recreational facilities and access to bus stops. As a disclosure document, the Draft EA has allowed agencies to comment on the identified mitigation measures. If more specific mitigation measures are raised by agencies as project development advances, Legacy Wailuku LLC will continue dialogue with the applicable agencies to define how such measures can be addressed as part of the project engineering and design phases of work. As a Section 201H project, the HHFDC and the Maui County Council will be engaged in the process of ensuring that conditions or modifications requested of the applicant are complied with. In summary, Legacy Wailuku LLC seeks to be transparent in the 201H process to ensure that mitigation solutions are appropriately implemented.

***Comment No. 3*:**

Exemptions: *As stated on Draft-EA Page 5, the Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes.*

The document includes an absurdly high number of major exemptions (18 pages listed on D-EA pages 208-213, and in more detail on PDF Pages 1147-1158) that are being requested. The very fact that these 18 pages of exemptions (the most we have yet to see) are included may be a hint that there are numerous significant impacts that the applicant wishes to not disclose. ***Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, etc. MUST be discussed and mitigated. They are not.***

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Response:

Legacy Wailuku LLC has recently undergone a vetting process for the requested exemptions with County agencies having jurisdiction over the applicable provisions of the Maui County Code. As a result, the list of exemptions is being revised, reduced, and streamlined to ensure that only those exemptions necessary to advance affordability while maintaining public health and safety, are proposed through the Section 201H process. The revised list of exemptions will be included in the Final EA and are not outside of the realm of what has been asked for in the past by other 201H projects. The lengthy number of pages represents Legacy Wailuku LLC's dedication to transparency and thoroughness in explaining the value, rationale, and specific purpose for the project. This thoroughness in explanation creates a lengthy document but the number of exemptions remains in line with other 201H projects that have been approved in the past by the Maui County Council. The final list of exemptions will be considered by the HHFDC and the Maui County Council in their respective decision-making processes for the 201H application.

Comment No. 4:

Traffic: *The Draft-EA's major omissions relate to traffic (PDF 55-73 +Appendix H).*

Comment No. 4A:

The Draft-EA TIAR traffic analysis has selectively underestimated the future impacts from several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center.

Both of these projects have already received initial entitlements, and it is likely that they will soon be impacting this 201-h affordable apartment project's traffic in a very significant manner. Similarly, this Wailuku Apartment Rental Housing will be impacting the traffic of those projects. ***A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts.*** *Those other projects in their full EIS have already-approved environmental documents with comprehensive TIAR information, but they did not include this Wailuku Apartment Rental Housing in their TIAR analysis.*

Response:

The Traffic Impact Assessment Report (TIAR) recognizes that the initial phase of the Waikapu Country Town project may be implemented by the Wailuku Apartment Rental Housing Project's 2021 base year. The TIAR also assumes that A&B's Waiale Project is unlikely to have units constructed by the base year. These assumptions, together with the accounting of ambient growth in the overall Wailuku region, were based on the traffic engineer's knowledge of local development conditions and the progress of specific proposed actions. The technical basis for and analysis of traffic impacts documented in the TIAR have been reviewed by the State Department

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of Transportation and the County Department of Public Works. The TIAR is considered to meet the traffic engineering reporting standards and quality control criteria.

Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help implement the regional traffic improvements cited in the TIAR. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income.

In summary, we believe that the project's TIAR appropriately addresses technical methodology requirements for analysis of project-related traffic impacts.

Comment No. 4B:

In addition to not completely considering the planned growth of nearby projects, the DEA has not considered the effects of new highways that will affect the flows of traffic. For example, if the Waiale Road is extended southward to Honopiilani Hwy. there will be a great increase on all of the intersections on Waiale Road, especially those near this project. (See PDF 933:
The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, *since they are unlikely to be built by Year 2021 given their current status,* ***these roadway improvements were not included in this TIAR. They should have been included, and a full EIS would discuss these projects.***

Since there is a total potential of: {Waikapu (1,440) +adjacent Waiale Road projects (146) + A&B Waiale (2,550) + Maui Lani (935) + Kehalani (956) + this Wailuku Apt. project (324)}
*= **6,351 units in this already congested area,** the cumulative future traffic being generated from these five nearby projects could significantly affect the already very limited roads in the area, I request that the HHFDC and the Maui Planning Organization (MPO) require:*

*i) that, along with the other developers, Wailuku Apartment Rental Housing Project be **required to provide a "fair share" of the cost of: a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems;***
and

*ii) that, along with the other major developments, Wailuku Apartment Rental Housing project be **required to pay its "fair share" to upgrade the highways, roads and intersections in this area.***

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Response:

The TIAR, which was updated in May 2018, recognizes that both the Waiale Road Extension and improvements to Waiko Road are planned improvements, but are not anticipated to be completed before the base year of 2021.The Chapter 343, HRS process for those projects will address their respective impacts prior to their implementation. With the potential changes in traffic volumes on Waiale Road as a result of these projects, the consideration of regional mitigation measures cited in the TIAR would appear to be appropriate complementary actions which can be implemented.

As noted above, Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help fund either comprehensive traffic studies or implement the regional traffic improvements cited in the TIAR. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income. As with other impact fees which may affect affordability, we support exemptions to impact fees which may adversely affect the ability to provide affordable housing to local residents.

Comment No. 4C:

Even though this project will not be completed until 2021, the TIAR has used 2021 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

Response:

The TIAR considered trip generation from other projects having reasonable probability of being completed by the Base Year of 2021. The study is based on current traffic engineering methodology and assumptions are considered reasonable and appropriate. Importantly, the TIAR recognizes regional improvements which may address existing peak hour congestion issues. Such regional improvement needs are best addressed through a comprehensive traffic impact fee system which can be equitably applied to projects without adversely affecting the equally important goal of providing affordable housing to local working families.

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Comment No. 5:

***Housing Unit Numbers**: Draft-EA Page 16: Although this project is being described as a 201-h affordable housing rental project, in fact **only 110 out of 324 units (only 34% of the units) are for those under 100% of Maui's median income (the AMI).** In other words, 214 units (the vast majority) are for those over the median Maui family income, either as 190 market units or 24 higher rent affordables.*

This is hardly an affordable housing project if over half the people in Maui would be unable to afford to even rent a unit in the project. A condition should we put on this project to require at least half of all the units to be available to those who are earning less than 100% of the average family income.

With regard to the number of available units, and especially the number of available affordable units, there are inconsistencies in the Draft-EA. For example: It clearly states on PDF page 25 that the affordable units will be rented out only to those between 80% and 140%. However, on the immediately preceding page in table 2 it indicates that there will be 55 units rented out to those between 51 to 80%. So what is the commitment?

Another example: throughout the draft EA it is stated that they will be 324 total units. However, in the table on PDF page 906, a total of 301 units is used.

Response:

This project falls within the affordability purview of the HHFDC which states, "The HHFDC establishes its affordability threshold for projects as those projects that primarily are affordable to households with incomes at or below 140% of the area median income.[1]" Maui County Code Chapter 2.96 also requires an income group distribution for the affordable units to be one-third very low- and low-income (50-80%AMI), one-third at below-moderate income at 80-100%AMI, and one-third at moderate income at 100-120%AMI. Affordability definition according to HUD is based on housing costs (either owned or rented) that is no more than 30% of a household's income. Our project will produce units following HHFDC's affordable rental guidelines as noted in **Table 2** of our EA with a unit distribution following Maui County's Chapter 2.96 requirements.

[1] HHFDC 201H Application, http://dbedt.hawaii.gov/hhfdc/201h-development-assistance/, page 1

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Table 2. HHFDC Maui Affordable Rental Guidelines, Distribution of Units by Income Category and Rental Ranges

Area Median Income Level	Income Group	Number of Units	Rental Range*	Percentage of Units
51–80%	Low income	55	$627 - $1,616*	17%
81-100%	Low-moderate income	55	$1,123 - $2,107*	17%
101-120%	Low-moderate income	55	$1,453 - $2,598*	17%
121-140%	Moderate income	30	$1,783 - $3,089*	9%
Subtotal of Affordable Units		**195**		60%
N/A	Market	129	—	40%
Grand Total		**324**		**100%**

* Note: Rents are based on 2018 HHFDC Rent Guidelines minus utility allowance. These are subject to change based on annually published rent guidelines and utility allowances by State and County agencies.

The high cost of living, construction costs, and land costs create an affordability problem for a large portion of the island's population. Meeting state and county affordability requirements and allowing a mixture of market rate units help to cross-subsidize a truly mixed income community that is healthy and does not require direct government subsidies. The project, due to the unit count and mix of incomes can be privately financed. Most rental projects of this scale in Hawaii require direct county or state subsidies to be financed and yield a very small number of units to meet the demand for local housing.

Because of the lack of supply, many families with higher incomes who need to rent are competing with families that are at lower incomes, absorbing the existing housing stock. With the introduction of this project, we provide new units that families earning over 100% AMI can also afford, thereby freeing up older housing stock for families that need low- to low-moderate rental units. Accordingly, the ripple effect in the marketplace goes beyond just what this project has to offer.

Regarding our commitments to income levels, Legacy Wailuku LLC will be offering 17% of rental units that will have rent ranges from 51%-80% AMI; 17% of the units will have rents ranging from 81%-100%AMI, and so forth.

With regard to inconsistencies in unit counts cited on page 906 of the Central Maui Rental Market Study and the final count of 324 units reflected in Chapter I of the EA, we note that the market study was done in advance of more detailed design and site planning work, and the 301 unit count was a preliminary estimate used to inform project programming parameters. The unit count of 324 is the correct number based on the detailed architectural studies subsequently performed. Studies relating to engineering and traffic which require greater specificity in unit count numbers, based their work on 324 units.

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Comment No. 6:

Off-Shore Residents: *Why is this project counting on demand from off-shore residents when there is such a great need for local residents.*
See pages Draft-EA PDF page 881 for discussion of this.
"The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to ***offshore demand*** *in a significant way - significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a* ***3-month lease period*** *is important, as that can take advantage of seasonal demand - meaning the winter and the summer 'high' periods."*
And on Draft-EA PDF page 885:

> *"****A good part of the demand for these units - especially studios, we believe - would be from offshore renters coming into the market to enjoy a 3-4 month stay*** *- using these units as a substitute for hotel rooms."*
> *And on Draft-EA PDF page 900:*
> *"We expect that Maui's visitor industry will continue to enjoy success and thereby* ***cultivate amongst a portion of the shortterm visitors a desire to lengthen their stay the following trip by renting a unit for 3 months, the minimum period for this project.*** *We expect the demand here coming out of Canada and the northern states of the US."*

And on Draft-EA PDF page 901:

> *"We see all sources of demand being present and accounted for . . . Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility.* ***We suggest there be a healthy mix, as the local presence will make project more attractive to the offshore rental demand."***
> *the US."*

And on Draft-EA PDF page 905:

> ***There will be additional demand from offshore renters.*** *It may be likely that* ***offshore demand might even be as high as a quarter or a third of the units****. A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that* ***there is an apparent offshore demand for these types of units.***

And finally on Draft-EA PDF page 906:

> *PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bed room unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bed room unit, as that has the deepest demographic, as an affordable unit.* ***Plus, we expect very good offshore demand for a small unit, such as this.***
>
> *Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families.* ***We also see a good potential demand for renting them out on the minimum lease of 3 months to offshore visitors****, grandparents who will cycle their grandchildren through the unit over*

EXHIBIT H

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the summer or winter months.

Response:

Legacy Wailuku LLC is presenting this project as a long-term rental with a 30-year deed restriction to maintain the affordability commitment. The market study considered all options prior to the design and planning of the project. The market researcher's opinions on what is highest and best use and survey of supply and demand are shared in the report. What Legacy Wailuku LLC does as a development program is an independent decision of what the market researcher notes as highest and best use.

Legacy Wailuku LLC will not utilize any unit for short-term vacation rentals. We agree that the current Maui market has a glut of short-term vacation rentals that is impacting the local long-term rental supply. All 324 units will be long-term rentals as committed to in our 201H application.

With respect to page 885 regarding short term rental studios, this is a recommendation of the market researcher studying the highest and best use for the market. It does not mean that Legacy Wailuku LLC will do this in our development program. Again, our 201H application/EA commitment is to have all 324 units utilized as long-term rentals to meet the local demand.

Similarly, Legacy Wailuku LLC is committed to the local rental market. Targeting the "offshore rental market" is not an objective of the project.

Comment No. 7:

***Population**: The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.*

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. ***In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.***

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Response:

The Draft EA, through the Central Maui Rental Market Study (Cassiday, 2017; Appendix "G"), recognizes the demographic conditions leading to the need for more affordable rental units. The study acknowledges that the rental demand will be from local workforce families. The analysis of impacts presented in the Draft EA carefully examines each impact parameter (e.g., public services, infrastructure, etc.) and presents a thorough analysis of the impacts and related mitigation measures associated with each parameter. In conducting the analysis and in preparing the technical studies which are used as a basis for analyzing key parameters (e.g., traffic, infrastructure), there are no assumptions made as to the locational origin of prospective renters, nor are there assumptions made regarding the relationship of prospective tenant's locational origins and resulting level of impacts. We agree that impacts from the project should be independently analyzed irrespective of the relocation patterns of tenants.

Comment No. 8:

Schools *which will service the Wailuku Apartment Rental Housing Project's many families, are all significantly* ***over capacity*** ***NOW.***

> ***"Pu'u Kukui Elementary School*** *is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years.* ***Maui Waena Intermediate School*** *is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years.* ***Maui High School*** *is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years." (Draft-EA PDF page 53)*

The small school impact fee to be paid to the State (far less than $1 million) will not begin to satisfy the DOE's ability to build the additional classrooms or improve the schools' capacities.
South Maui cannot even gets its high school built.

Response:

Legacy Wailuku LLC recognizes the current enrollment and capacity issues facing Central Maui schools, and is willing and ready to support and comply with the mitigation protocols that have been adopted by the Department of Education. Legacy Wailuku LLC also recognizes that school capacity concerns are community-wide issues, which must be addressed in the context of broader educational facilities capital improvements planning which will ensure quality education for our next generation of children. We understand that the provision of quality education must be equitably provided to residents of new housing units, whether located at Kehalani, Maui Lani or Waikapu, and that each housing provider will comply with impact fee requirements in place at the time of project implementation.

Comment No. 9:

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Finances: *Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Apartment Rental Housing project. They have already received several entitlements without trying to get any 201-h exemptions.*

Response:

Legacy Wailuku LLC views the affordable housing crisis as one which requires multiple players, each able to contribute to the overall solution based on the level of expertise each is able to bring to the table. Development entities willing to help Maui's workforce families will approach the problem in ways which are unique, based on their respective long-term development objectives and housing development experience. Legacy Wailuku LLC is in a position to bring new affordable housing inventory to market in a relatively short timeframe, which is viewed as a positive outcome for the island's local families.

Both of the projects you reference also have the advantage of scale with thousands of units in their pipeline to spread costs and subsidize their affordability requirements. Their ratio of affordable to market is far less than what we are proposing. The Wailuku Apartment Rental Housing Project is not a large scale master planned community, but a 324-unit project with a distribution of 60% affordable and 40% market.

Comment No. 10:

Play Areas and Parks: *The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great.*
Among the 1,000 residents there will be many toddlers who will be able to use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). The greater impact will fall on the 100+ children of school age. These children will need to get to parks and playing fields along streets lacking bicycle routes and with minimum sidewalks and by crossing several very busy and dangerous high traffic avenues.
The so called "swimming pool" appears to be merely a small wading pool, totally insufficient for 1,000 residents.

Response:

Access to recreational facilities by residents, both children and adults, of the proposed Wailuku Apartment Rental Housing Project is an important aspect of the project's proximity to existing infrastructure and services. Sidewalks provided by the project will provide pedestrian connectivity to the Waiale Park, located along Waiale Road, adjacent to the Hale Makana O Waiale apartments, and the Maui Lani Regional Park, located along Maui Lani Parkway. The Waiale Park is located approximately 0.25 mile from the project site, while the Maui Lani Regional Park is located

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approximately 0.9 mile from the project site. Both are accessible via signalized crosswalks and continuous sidewalks.

Comment No. 11:

Solid Waste: *The Draft-EA on page 34 mentions a private company being responsible for Solid Waste disposal. "Solid waste collection services for the project will be provided by a privately managed company and disposed at Maui County's Central Maui Landfill." Who will be required to pay for this company? Residents in affordable units?*

The Draft-EA does not show any locations for solid waste disposal / trash bins. There will be many of these for 324 units. Nor does it seem that big rubbish trucks will be able to turn around at the end of the 300'+ driveway. Backing up early in the morning will be a noisy disturbance. The response to this statement in my previous letter was incomplete and inadequate, only that the developer would look into it. However, that did not happen.

Response:

The project's design consultants will identify locations suitable for placement of trash bins. As with fire truck turnaround solutions being coordinated with the Department of Fire and Public Safety, turnaround areas for waste collection trucks will be configured into the final site plan to ensure that trash collection can be efficiently and safely conducted and managed. It is noted that the cost for waste collection service will be included as part of each tenant's monthly rental amount.

Comment No. 12:

Pedestrian Safety: *This revised DEA has many improved safety features for pedestrians: sidewalks on Kuikahi and a cross-walk from the project to Foodland and Longs.*

Unfortunately, there is only a partial sidewalk along Waiale Road. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. To get to the nearby stores they will need a complete sidewalk along Waiale and it should be provided south of the Waiale Road exit/entrance. Because the project can gain 201-h approval only if "the proposed housing project is consistent with the purpose and intent of Section 201H-38, HRS, and the project's design meets all health and life safety requirements per the building code and Maui County Code."

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Response:

While the provision of sidewalks along the entire length of Waiale Road is desirable, there is no continuity of sidewalks provided along previously developed parcels which border Waiale Road. We would, however, be happy to discuss collaborative, nexus-based opportunities for the provisions of sidewalks along Waiale Road with the County of Maui and other landowners whose properties border Waiale Road.

Comment No. 13:

A&B's 2,550 unit Waiale project: *Maps on PDF pages 18 +35 and throughout the DEA do not show the major project to the South and to the East. The map and text should include the largest project (A&B's 2,550 unit Waiale project), the one that will have the greatest impact on the proposed Wailuku Apt project, and vice verso will be affected by the Wailuku Apt't project.*

Response:

The proposed Wailuku Apartment Rental Housing Project is anticipated to be completed and occupied by the year 2021. The context for project need recognizes that other development projects are ongoing, including new housing developments in Kehalani and Maui Lani. Other development proposals, including A&B's Waiale project, or other proposed projects within the Central Maui region, will contribute to meeting the island's housing needs. Collectively, in today's market, all projects, whether they be in Central Maui, South Maui, or West Maui, are considered complementary to addressing the housing shortage. Legacy Wailuku LLC does not view housing proposals in other locations of the island as being competitively detracting from the goal of providing housing to local families. We believe that all providers of new housing inventory join us in our goal of improving life quality on Maui.

Comment No. 14:

Water: *The Draft-EA PDF Pages 44 + 45 and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gallons for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with sizeable affordable units)?*

Response:

Legacy Wailuku LLC is working with the Department of Water Supply (DWS) to ensure that sufficient water source will be available to serve the project, while ensuring that other affordable projects will have the same opportunity to access water in accordance with Maui County Code Section 14-12. We note that Legacy Wailuku LLC views the provision of affordable housing as a significant public benefit, irrespective of who is able to meet this need. We support other providers

schatz collaborative
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Schatzcollaborative.com

of affordable housing and understand that each provider will have the same benefits provided by law with respect to water source availability.

Comment No. 15:

Parking: *The original draft contained only 486 parking stalls. This DEA has over 600. How was this change made? Have all the stalls been reduced in width/size? Will there be adequate parking space for pick-ups and larger vehicles? Special visitor parking? Handicapped parking?*

Response:

Additional code compliant parking, from 486 stalls (original draft) to 661 stalls, was provided by making site plan adjustments and providing the allowable number of tandem stalls. All stalls are standard size 8'-6" x 18'. Loading spaces are provided and ADA accessible stalls are provided. In compliance with Maui County Code, there are 488 full size stalls, 163 full size tandem stalls, 8 accessible stalls and 2 stalls that are van accessible

Comment No. 16:

300 foot+ driveway, cul-du-sac: *Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night with 600+ cars, will firetrucks be able to access all buildings and be able to turn around, or even safely back-up?*

Response:

As part of the process of vetting the proposed project exemptions, Legacy Wailuku LLC has received preliminary comments from the County's Department of Fire and Public Safety. At present time, an exemption to Maui County Code, 16.04C, Fire Code will not be requested. The design team has met and will continue to meet with the Department of Fire and Public Safety during the early stages of preparing construction documents to address their concerns on fire protection, vehicular access, and to identify viable solutions for fire truck turnarounds.

Comment No. 17:

Project Management: *Will the County ever have any responsibilities if Legacy goes out of business? (Repairs? Ownership? Management? Utilities? Insurance? etc.)*
Who will manage the property? Establish homeowner association fees?
The impacts have yet to be discussed.

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Response:

This project is privately financed without direct government subsidies. Therefore, if Legacy Wailuku LLC does go out of business then the lender and investors will take over ownership and management of the project. This would be subject to a Declaration of Land Use Restrictive Covenants to be recorded on the fee simple title of the property, to ensure that affordability requirements are maintained pursuant to the 201H approval process. Legacy Partners and Pier Investments have a proven and strong track record that provides assurance that a reputable developer is managing this project. Legacy Wailuku LLC is also the management company responsible for insurance, utilities, repairs, etc. There are no homeowner association fees for this project.

These questions would be applicable for projects that use public funding to finance their projects. But again, as noted above, we are privately financed.

Comment No. 18:

Long-Term: *After the 30 years what will happen? Will renters ever have the right to purchase? Will rents suddenly rise?*

Response:

After the 30-year deed restriction expires, Legacy Wailuku LLC could renew their affordability commitment. Legacy Wailuku LLC could also offer the units for purchase, but such an alternative would require further coordination with the County of Maui. We are committed to providing tenants a "safety net" for housing. Any sudden increase in rents is contrary to our commitment to maintaining that "safety net".

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

schatz collaborative

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Should you have any questions regarding our responses, please feel free to contact me at email lindaschatz@schatzcollaborative.com or by phone at (808) 428-8717.

Very truly yours,

Linda Schatz

LS

cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Ben Lee, Clifford Planning & Architecture
Darren Unemori, Warren S. Unemori Engineering, Inc.
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Erin Mukai, Munekiyo Hiraga
K:\DATA\Legacy\Wailuku Afford Rental\Applications\Draft EA\Draft EA responses\Dick Mayer.doc

EXHIBIT H

MEETING MINUTES FROM THE AUGUST 15, 2018 HAWAIʻI HOUSING FINANCE AND DEVELOPMENT CORPORATION BOARD OF DIRECTORS MEETING

4

HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
BOARD OF DIRECTORS
SPECIAL MEETING

AUGUST 15, 2018

MINUTES

The Board of Directors of the Hawaii Housing Finance and Development Corporation met for a special meeting at J. Walter Cameron Center, located at 95 Mahalani Street, Wailuku, Hawaii, on Wednesday, August 15, 2018, at 10:30 a.m.

I. CALL TO ORDER/ ROLL CALL

With a quorum present, Chair Milo Spindt called the meeting to order.

Those present and excused were as follows:

Present: Director Milo Spindt, Chair
Director Leilani Pulmano, Vice Chair (10:31 a.m.)
Director Rona Fukumoto, Secretary
Director Donn Mende
Director George Atta
Director Sara Lin
Designee Scott Kami for Director Laurel Johnston
Designee Mary Alice Evans for Director Luis Salaveria

Executive Director Craig Hirai

Excused: Director Melvin Kahele

Staff Present: Diane Taira, Deputy Attorney General
Janice Takahashi, Chief Planner
Darren Ueki, Finance Manager
Stan Fujimoto, Development Section Chief
Ken Takahashi, Housing Development Specialist
Genoa Ward, Housing Development Specialist
Esa Pablo, Secretary to the Board

Guests: Linda Schatz, Legacy Wailuku LLC/Schatz Collaborative LLC
Vince Bagoyo, J. Bagoyo Development Group LLC
Charles P. Wathen, Legacy Wailuku LLC
Janine Clifford, Clifford Planning & Architecture
Ben Lee, Clifford Planning & Architecture
Darren Unemori, W.S. Unemori Engineering
Erin Mukai, Munekiyo Hiraga
Michael Munekiyo, Munekiyo Hiraga
Tyler Fujiwara, Austin, Tsutsumi & Associates
Brian Ige, Dowling Company Inc.
Bruce U`u, Hawaii Regional Council of Carpenters
Ivan Lay, Hawaii Regional Council of Carpenters
Kehau Filimoe`atu, Hawaii Community Assets
Linda Munsell, County Housing Division
Saumalu Mata`afa, Office of Council Services
William Spence, Maui County Department of Housing and Human Concerns

II. A. APPROVAL OF MINUTES Regular Meeting 4/12/18

Chair Spindt deferred approval of the meeting minutes of April 12, 2018 and July 12, 2018 to the Board's next regular meeting to be held on September 13, 2018.

Housing Development Specialist Ken Takahashi presented the For Action, stating staff's recommendation as follows:

That the HHFDC Board of Directors approve the following for the Wailuku Apartment Rental Housing Project, in Wailuku, Maui, Hawaii, TMK: (2) 3-5-001:064, substantially as discussed this For Action:

A. Certification of Legacy Wailuku LLC, or other successor entity approved by the Executive Director, as an Eligible Developer pursuant to Section 15-307-24, HAR;

B. Development of the Wailuku Apartment Rental Housing Project with the proposed exemptions from statutes, ordinances and rules of the County of Maui as recommended for approval, pursuant to Section 201H-38, HRS;

C. Execution of a development agreement required for such exemptions as approved by the Executive Director; and

D. Authorize the Executive Director to take all actions necessary to effectuate the purpose of this For Action;

Subject to the following:

E. Approval with or without modification by the Maui County Council pursuant to Section 201H-38, HRS;

F. Approval by the Maui County Council of a District Boundary Amendment (DBA) to the State Land Use District Map to change the existing Agricultural District designation of the Property to the Urban District prior to execution of a development agreement; and

G. Compliance with all rules and regulations and such other terms and conditions as may be required by the Executive Director.

Director Mende moved, seconded by Director Fukumoto

That staff's recommendation be approved.

Vice Chair Pulmano recused herself from the vote.

Takahashi stated that by letter dated August 2, 2017, the County of Maui Department of Housing and Human Concerns confirmed that the proposed project of Legacy Wailuku LLC (Developer) will not meet the Maui County Rental Guidelines for processing and therefore, is being processed under the HHFDC's Affordable Rental Guidelines. The statutory basis for the approval of housing projects with exemptions from statutes, ordinances, and rules of any government agency relating to planning, zoning, and development of land was referenced.

The Wailuku Apartments Rental Housing (Project) will require a State District Boundary Amendment that would change the existing State Agricultural District Classification to the State Urban District.

The Developer believes that the requested exemptions are necessary to achieve and maintain the financial feasibility of the proposed Project and would enable the Developer to help fulfill a critical need for affordable rental housing without the use

II. B. APPROVAL OF MINUTES Regular Meeting 7/12/18

III. A. DISCUSSION AND/OR DECISION MAKING Approve the Certification of Legacy Wailuku LLC, or Other Successor Entity Approved by the Executive Director, as an Eligible Developer Pursuant to Section 15-307-24, Hawaii Administrative Rules; the Project Proposal Including Exemptions from Statutes, Ordinances and Rules Pursuant to Section 201H-38, Hawaii Revised Statutes; and Execution of Development Documents for Approved Exemptions for the Proposed Wailuku Apartments Rental Housing Project, Located in Wailuku, Maui, TMK No.: (2) 3-5-001:064

of government subsidies, and deliver rental units at a location within the Urban Growth Boundary of the Maui Island Plan in proximity to Wailuku Town, existing residential developments, public facilities and support services. Furthermore, the Project would yield substantially more units than what would be allowed under the current Agricultural Zoning District.

The estimated total project budget is approximately $96.6 million, with the following estimated project schedule:

- Start Design/Entitlement/Foundation Permit – November 2018
- Closing of Construction Financing – December 2019
- Start of Construction – December 2019
- Projected Occupancy Permit – September 2021

Takahashi opened for questions, along with the Developer representatives, who provided a brief presentation.

Linda Schatz, the Developer's representative for Legacy Wailuku, LLC, thanked the Board for their time and travel to Maui. Schatz stated that they are very excited for this unique project in terms of its scale, being privately financed and includes Community input.

Chair Spindt opened the floor for anyone who wished to provide public testimony on this matter. Public testimony was provided by the following:

William Spence, Director of the Maui County Department of Housing and Human Concerns (Maui DHHC), expressed the Maui DHHC's strong support of the Project, being in an ideal location near jobs, shopping, and goods and services. He further stated that the Project also provides needed housing units for Maui residents and overall, is a very good project.

Director Atta asked if the project site services any agricultural area. Spence stated that the project site does not service any agricultural purpose at this time and is within the County of Maui Urban Grown Boundary, designated for urban development.

Bruce U`u, with Hawaiian Regional Council of Carpenters, expressed his support of the Project, stating that there is a dire need for housing and a great need for public and private partnerships with the government to help subsidize housing cost for Maui residents. U`u thanked the Board and its predecessors for providing affordable housing opportunities for previous family generations and those to come.

Ivan Lay, with Hawaiian Regional Council of Carpenters, expressed his support of the Project, stating that affordable rentals are greatly needed in the Wailuku area, and believes the Project is situated in the perfect location for working families. Lay thanked and expressed his appreciation to the Board for their time.

With no further discussion, Chair Spindt thanked everyone for attending and supporting the Project.

The motion was carried, with Vice Chair Pulmano recusing herself from the vote.

RECESS
10:55 a.m.
RECONVENED
11:07 a.m.

The Board recessed the meeting at 10:55 a.m. and reconvened at 11:07 a.m.

III. B.
DISCUSSION AND/OR DECISION MAKING
Approve the Recommendations of

Chief Planner Janice Takahashi presented the For Action, stating staff's recommendation as follows:

That the HHFDC Board of Directors:

A. Approve the recommendations of the Qualified Allocation Plan Subcommittee.

B. Authorize the Executive Director to undertake all tasks necessary to effectuate the purposes of this For Action.

the Qualified Allocation Plan Subcommittee

Vice Chair Pulmano moved, seconded by Director Fukumoto

That staff's recommendation be approved.

Takahashi stated that the Qualified Allocation Plan (QAP) Subcommittee's recommendations were presented last week, at its August 9, 2018 Board of Directors Meeting and opened for questions.

Chair Spindt asked if the Board had any further comments or questions regarding the changes that were made to the QAP, noted at the August 9, 2018 meeting, addressing two of the six recommendations relating to #2, energy efficiency and #3, adaptive re-use. The other recommendations will require more time and continued discussions with program users.

There being no questions, the motion was unanimously carried.

III. C. DISCUSSION AND/OR DECISION MAKING

Approve Request to Conduct a Public Hearing on the Low-Income Housing Tax Credit Program's 2019/2020 Qualified Allocation Plan

Finance Manager Darren Ueki presented the For Action, stating staff's recommendation as follows:

That the HHFDC Board of Directors approved the following:

A. Authorize the Executive Director, or his designated representative, to conduct a public hearing on the proposed 2019/2020 QAP;

B. Authorize the Executive Director to take all action necessary to effectuate the purpose of this For Action.

Vice Chair Pulmano moved, seconded by Director Fukumoto

That staff's recommendation be approved.

Ueki stated that based on the discussions and findings of the QAP Subcommittee, changes were incorporated in policy and actual scoring mechanisms within the QAP.

Ueki noted the following tentative timeline schedule:

- September 25, 2018 – Conduct a Public Hearing
- November 8, 0218 – Final Approval of the QAP by the Board
- December 14, 2018 – Application Available
- February 15, 2019 – Applications Due: 9% LIHTC and RHRF – FY2019 (Funding Round 1)
- May/June 2019 – Present Recommendations to the Board
- June 2019 – RHRF – FY2019 (Funding Round 2)
- October/November 2019 – Present Recommendations to the Board

With the QAP Subcommittee recommendations now approved, Director Lin asked what are the next steps. Chair Spindt stated that the QAP Subcommittee will be dissolved and a new subcommittee will be established to look at the 2020/2021 QAP.

Chair Spindt thanked staff and the QAP Subcommittee members for all their hard work.

With no further discussion, the motion was unanimously carried.

Chair Spindt stated that the QAP Subcommittee will now be dissolved and asked for volunteers for a new QAP Subcommittee to look at the 2020/2021 QAP.

The new QAP Subcommittee will consist of the following members:

- Milo Spindt
- Leilani Pulmano
- George Atta
- Sara Lin

Designee Kami moved, seconded by Designee Evans

That the following item be added to the agenda:

"Discussion on Requested Modifications to Award of Request for Proposals No. 17-010-PPMS Affordable Rental Housing Portfolio Restructuring and Preservation to Join Offerors Standard Property Company, Inc. and Stanford Carr Development, LLC as Successful Offeror"

With the motion unanimously carried, the above title was added to the agenda.

Designee Kami moved, seconded by Designee Evans

That the HHFDC Board of Directors amend the previously approved Award of Request for Proposals No. 17-010-PPMS Affordable Rental Housing Portfolio Restructuring and Preservation to joint offerors Standard Property Company, Inc. and Stanford Carr Development, LLC, as Successful Offeror, to provide for a revised due diligence expiration date to end no later than September 17, 2018.

The motion was unanimously carried.

Chair Spindt asked Executive Director Hirai to speak on the reasoning for the amendment. In regard to discussions held at its August 9, 2018 Board Meeting to tentatively hold a Special Meeting on August 29, 2018, Executive Director Hirai stated that staff believes it would be more efficient and cost effective to not have another Special Meeting this month, but rather extend the due diligence date and further discuss the matter at its regularly scheduled Board Meeting on September 13, 2018.

There being no further discussion, Chair Spindt called for the question.

With no objections, the main motion, as amended, was carried.

IV. ADJOURNMENT
11:30 a.m.

There being no further business on the agenda, Designee Evans moved, seconded by Vice Chair Pulmano

That the meeting be adjourned at 11:30 a.m.

The motion was unanimously carried.

RONA FUKUMOTO
Secretary

PRELIMINARY DEVELOPMENT PLANS

5



NOTE: ALL LANDSCAPE PLANTING AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM UTILIZING WATER AND ENERGY CONSERVING EQUIPMENT AND PRACTICES.

PRELIMINARY LANDSCAPE PLAN

0 50 150

50 25

NORTH
Scale: 1" = 50' - 0"

PRELIMINARY PLANT LIST:

1. LARGE SHADE TREES: (35' Canopy or Larger)
   - e.g.: Kukui
   - Kamani
   - Koa
2. MEDIUM-SIZED SHADE TREES: (35' Canopy Max.)
   - e.g.: Kou
   - Manele
   - Ho'awa
3. SMALL TREES: (16' Canopy Max.)
   - e.g.: 'Ohi'a
   - Hala
   - Koai'a
   - Alahe'e
4. LARGE SPECIMEN SHADE TREE:
   - e.g.: Monkeypod (Existing Onsite tree to be relocated)
5. SINGLE-TRUNKED PALMS:
   - e.g.: Coconut
   - Loulu
6. MULTI-TRUNKED PALMS:
   - e.g.: Areca
   - MacArthur
7. SHRUBS:
   - e.g.: A'ali'i
   - Anapanapa
   - Blue Vitex
   - Nanu
   - Koki'o Ke'oke'o
   - 'Ulei
   - Beach Naupaka
   - Pikake
   - Ma'o Ma'o Hau Hele
   - Kulu'i
8. GROUND COVERS:
   - e.g.: 'Ilima papa
   - Nehe
   - Kupukupu Fern
   - Pili Grass
   - Pohinahina
   - Naio Papa
   - 'Uki'uki
9. GRASSES:
   - e.g.: Hybrid Bermuda
   - El Toro Zoysia

RUSSEL Y. GUSHI
ASLA
LANDSCAPE ARCHITECT

P.O. BOX 2291
WAILUKU, MAUI, HAWAII 96793
TEL: (808) 242-6505
e-mail: yushigushl@hawaii.rr.com

RUSSEL Y. GUSHI LICENSED PROFESSIONAL LANDSCAPE ARCHITECT No. 0282 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS STIPULATED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

LICENSE EXPIRES: APRIL 30, 2018

WAILUKU WORKFORCE APARTMENTS
TMK: (2) 3-5-001-064
EAST KUIKAHI DRIVE & WAIALE ROAD
WAILUKU, MAUI, HAWAII

PRELIMINARY LANDSCAPE PLAN

NO.	DATE	REVISION	BY

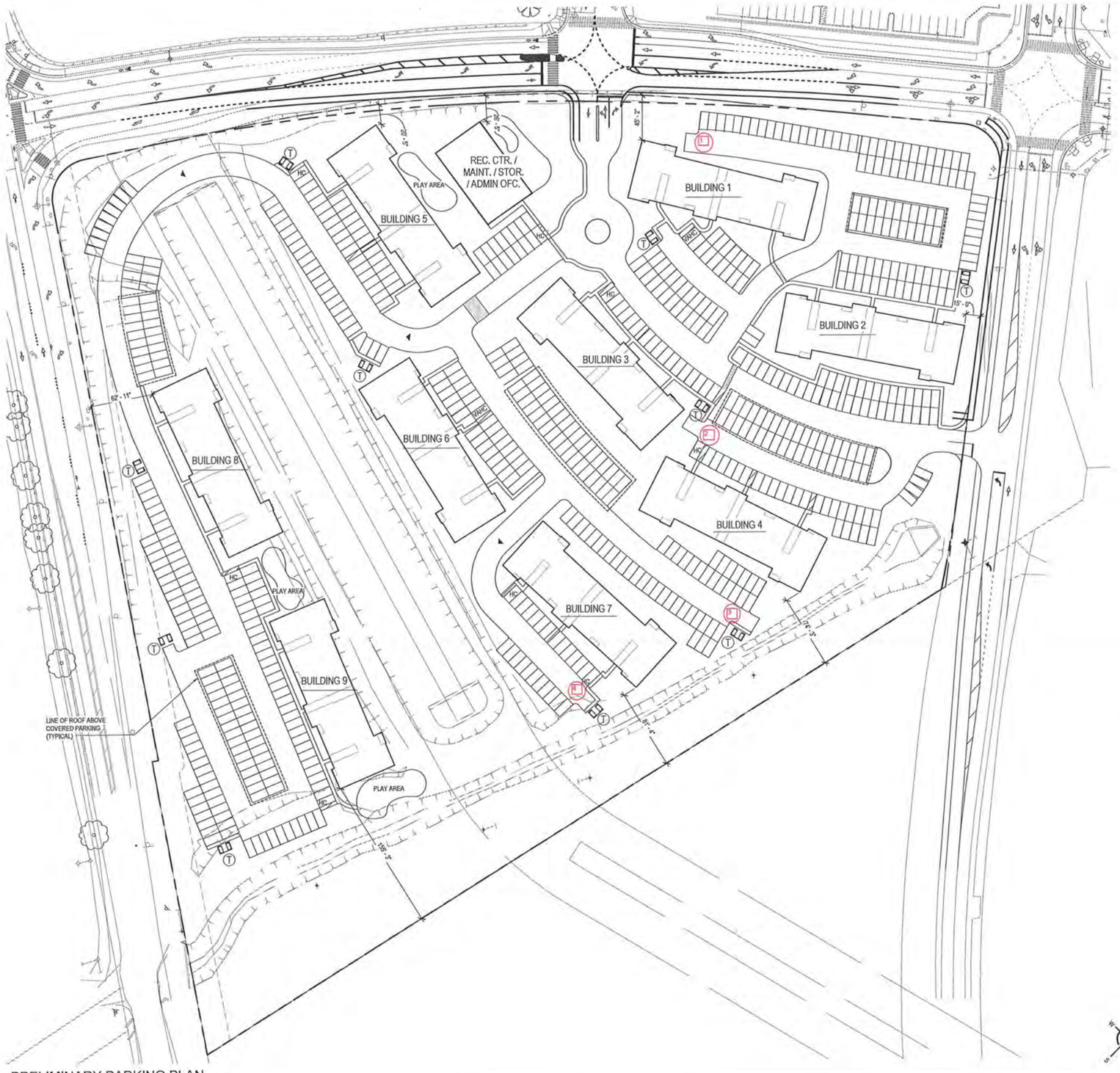
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PROJECT NO: 17-06

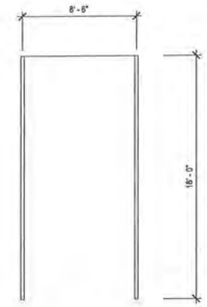
DATE: JULY, 2017

DRAWING NO: LP-1

SHEET OF



1 PRELIMINARY PARKING PLAN
1" = 40'-0"



2 PARKING STALL DETAIL
1/4" = 1'-0"
0 1 2 4 8

PARKING ANALYSIS	
FULL SIZE:	488
TANDEM:	163
ACCESSIBLE:	8
(1:6 VAN ACCESSIBLE):	2
TOTAL:	661

PROGRAMMED:
324 x 2 = 648 RESIDENT STALLS
5,000 SF @ 1:500 SF = 10 ADMIN OFC. STALLS

PARKING PLAN LEGEND

T	TRASH
HC	ACCESSIBLE STALLS
V	VAN ACCESS

Clifford Planning & Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

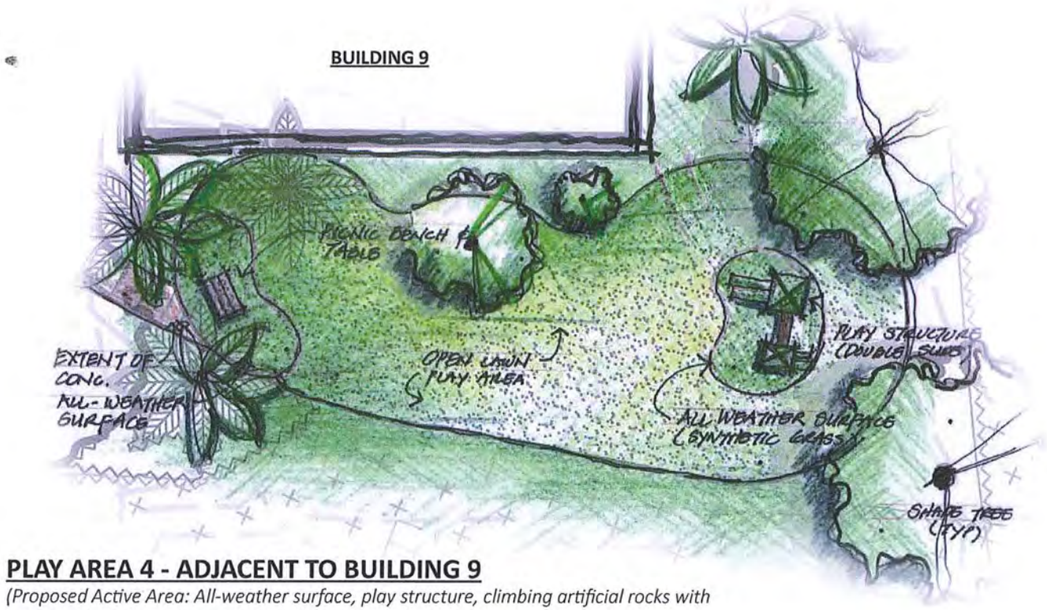
Authorization to use these plans for the issuance of a Building Permit shall be evidenced only by the appearance of the Architect's stamp below, together with the original signature of the Architect.

This work was prepared by me or under my supervision and construction of this project will be under my observation. (Observation of construction as defined in Section 16-115-9 of the State of Hawaii, Department of Commerce and Consumer Affairs, Hawaii Administrative Rules, for Professional Engineers, Architects, Surveyors, and Landscape Architects 10/26/01).

LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

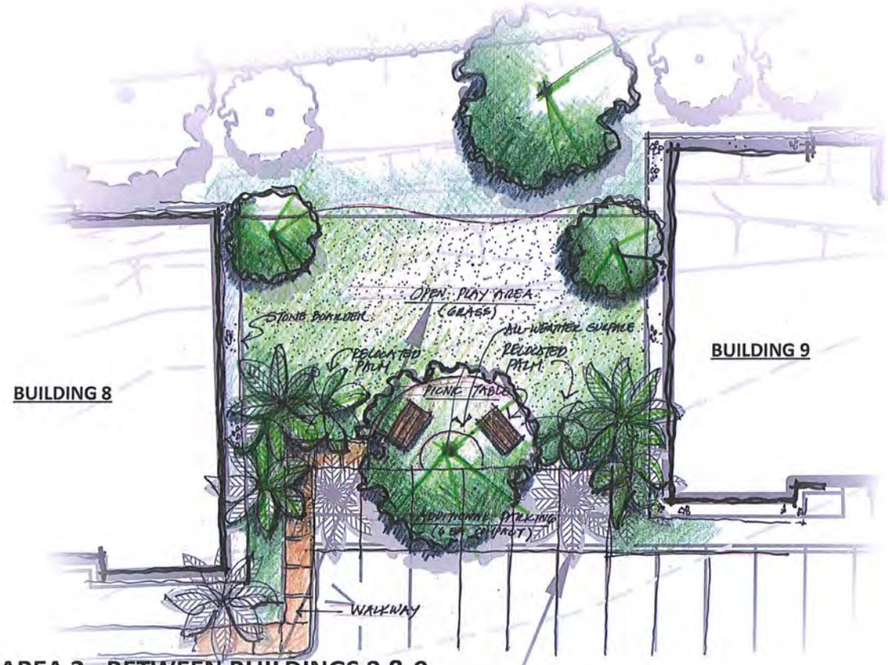
PROJECT NAME:	WAILUKU WORKFORCE APARMENTS
PROJECT NUMBER:	416.007
TITLE:	PRELIMINARY PARKING PLAN
DATE:	02/09/2018 (R1)
SCALE: As indicated	DRAWN BY: RY / CHECKED BY: BL
DRAWING NO:	A100
SHEET ___ OF ___	

REVIT02022015
2/9/2018 7:12:36 PM C:\Users\ray.yamada\Documents\Wailuku Site Plan_ray.yamada.rvt



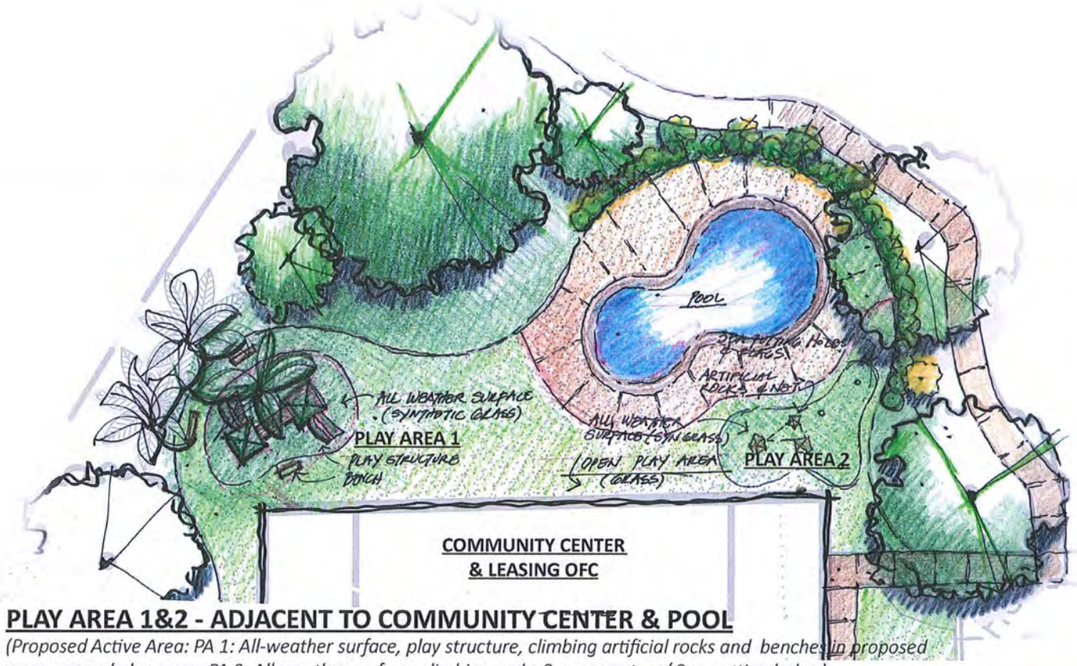
PLAY AREA 4 - ADJACENT TO BUILDING 9

(Proposed Active Area: All-weather surface, play structure, climbing artificial rocks with picnic table & bench in proposed open grassed play area.)



PLAY AREA 3 - BETWEEN BUILDINGS 8 & 9

(Proposed Passive Area: All-weather surface, picnic tables & bench in proposed open smaller grassed play area. Additional tandem parking provided.)



PLAY AREA 1&2 - ADJACENT TO COMMUNITY CENTER & POOL

(Proposed Active Area: PA 1: All-weather surface, play structure, climbing artificial rocks and benches in proposed open grassed play area. PA 2: All-weather surface, climbing rocks & cargo nets w/ 3ea putting holes.)



OPEN LAWN PLAY AREA CONCEPTS

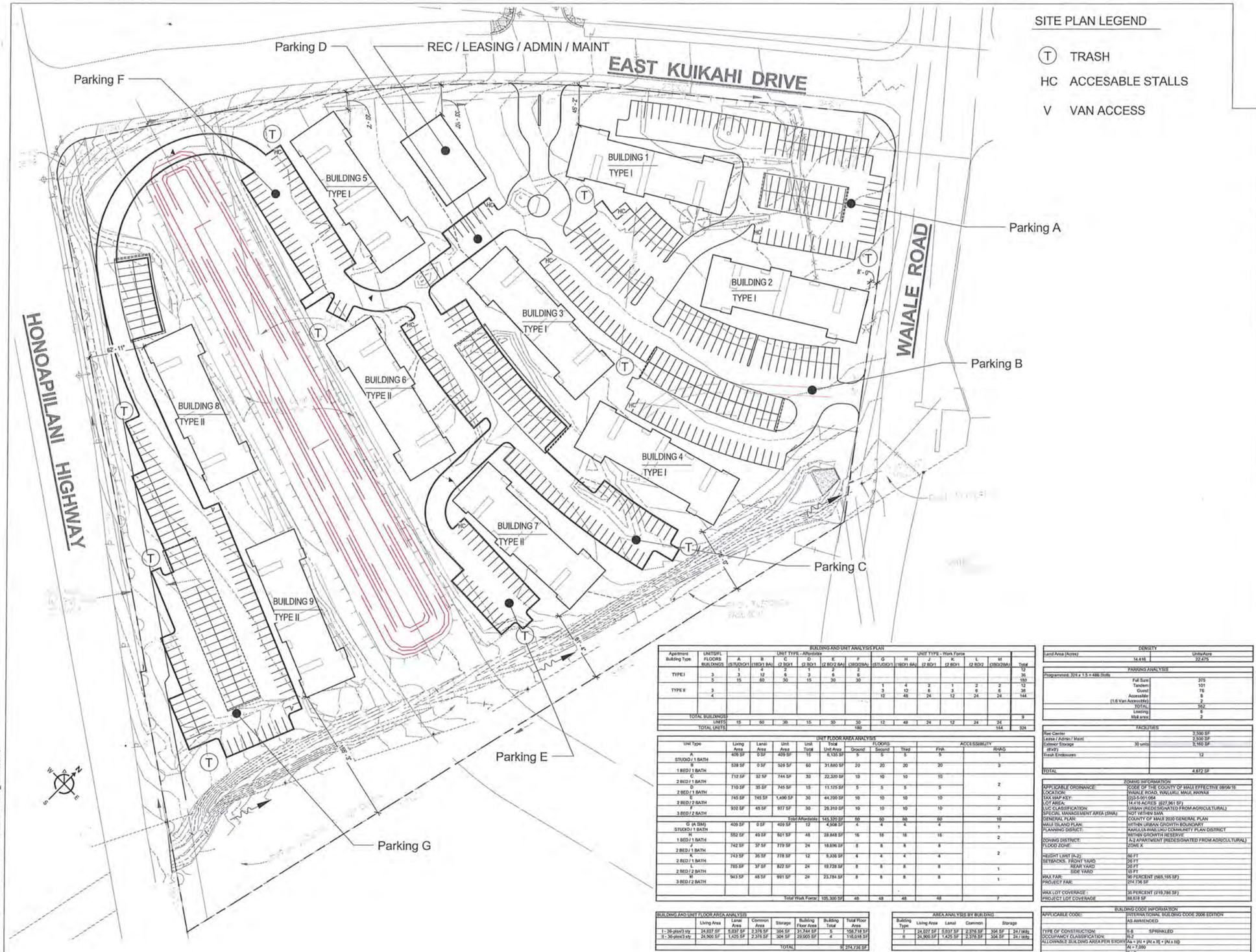
WAILUKU APARTMENTS

NOVEMBER 13, 2017

LEGACY PARTNERS

PIER MANAGEMENT - HAWAII LLC
SCHATZ COLLABORATIVE LLC

Clifford Planning Architecture



SITE PLAN LEGEND

- (T) TRASH
- HC ACCESABLE STALLS
- V VAN ACCESS

BUILDING AND UNIT ANALYSIS PLAN

Apartment Building Type	UNITS/FL FLOORS BUILDINGS	UNIT TYPE - Affordable A (STUDIO/1 BA)	B (1BD/1 BA)	C (2 BD/1 BA)	D (2 BD/1 BA)	E (2 BD/2 BA)	F (3BD/2BA)	UNIT TYPE - Work Force G (STUDIO/1 BA)	H (1BD/1 BA)	J (2 BD/1 BA)	K (2 BD/2 BA)	L (2 BD/2 BA)	M (3BD/2BA)	Total
TYPE I	1			2	1	2	4							12
	3	3	12	6	3	6	6							36
	5	15	60	30	15	30	30							180
TYPE II	3							1	4	2	1	2	2	12
	4							3	12	6	3	6	6	36
								12	48	24	12	24	24	144
TOTAL BUILDINGS														9
UNITS		15	60	36	15	30	30	12	48	24	12	24	24	
TOTAL UNITS														324

UNIT FLOOR AREA ANALYSIS

Unit Type	Living Area	Lanai Area	Unit Area	Unit Total	Total Unit Area	FLOORS Ground	Second	Third	ACCESSIBILITY FHA	RHAG
A STUDIO / 1 BATH	409 SF	0 SF	409 SF	15	6,135 SF	5	5	5	5	1
B 1 BED / 1 BATH	528 SF	0 SF	528 SF	60	31,680 SF	20	20	20	20	3
C 2 BED / 1 BATH	712 SF	32 SF	744 SF	30	22,320 SF	10	10	10	10	2
D 2 BED / 1 BATH	710 SF	35 SF	745 SF	15	11,175 SF	5	5	5	5	
E 2 BED / 2 BATH	745 SF	745 SF	1,490 SF	30	44,700 SF	10	10	10	10	2
F 3 BED / 2 BATH	932 SF	45 SF	977 SF	30	29,310 SF	10	10	10	10	2
			Total Affordable:	145,320 SF		60	60	60		10
G (A SM) STUDIO / 1 BATH	409 SF	0 SF	409 SF	12	4,908 SF	4	4	4		1
H 1 BED / 1 BATH	552 SF	49 SF	601 SF	48	28,848 SF	16	16	16	16	2
J 2 BED / 1 BATH	742 SF	37 SF	779 SF	24	18,696 SF	8	8	8	8	
K 2 BED / 1 BATH	743 SF	35 SF	778 SF	12	9,336 SF	4	4	4	4	2
L 2 BED / 2 BATH	785 SF	37 SF	822 SF	24	19,728 SF	8	8	8	8	1
M 3 BED / 2 BATH	943 SF	48 SF	991 SF	24	23,784 SF	8	8	8	8	1
			Total Work Force:	165,300 SF		48	48	48	48	7

BUILDING AND UNIT FLOOR AREA ANALYSIS

	Living Area	Lanai Area	Common Area	Storage	Building Floor Area	Building Total	Total Floor Area
I - 36-plex/3 sty	24,027 SF	5,037 SF	2,376 SF	304 SF	31,744 SF	5	158,718 SF
II - 36-plex/3 sty	24,900 SF	1,425 SF	2,376 SF	304 SF	29,005 SF	4	116,018 SF
				TOTAL			9 274,736 SF

AREA ANALYSIS BY BUILDING

Building Type	Living Area	Lanai	Common	Storage	
I	24,027 SF	5,037 SF	2,376 SF	304 SF	24 / bldg
II	24,900 SF	1,425 SF	2,376 SF	304 SF	24 / bldg

*Note: The above area calculations are preliminary and require verification through the architectural design/review process.

Accessibility:
- All ground floor 1- story units shall comply with the Federal Fair Housing Act Accessibility Guidelines (FHA)
- All public and accessible routes shall comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- 5% of total units shall comply with the Hawaii State Residential Housing Accessibility Guidelines (RHAG)
- 2% of total units shall comply with Visual and Audio requirements.

DENSITY

Land Area (Acres)	Units/Acre
14.416	22.475

PARKING ANALYSIS

Programmed: 324 x 1.5 = 486 Stalls	
Full Size:	375
Tandem:	101
Guest:	76
Accessible:	8
(1.6 Van Accessible)	2
TOTAL:	562
Loading:	6
Mail area:	2

FACILITIES

Rec Center	2,500 SF
Lease / Admin / Maint	2,500 SF
Exterior Storage (6'x9')	2,160 SF
30 units	
Trash Enclosures	12
TOTAL	4,672 SF

ZONING INFORMATION

APPLICABLE ORDINANCE:	CODE OF THE COUNTY OF MAUI EFFECTIVE 08/06/18
LOCATION:	WAIALE ROAD, WAILUKU, MAUI, HAWAII
TAX MAP KEY:	(2)3-5-001:064
LOT AREA:	14.416 ACRES (627,961 SF)
LUC CLASSIFICATION:	URBAN (REDESIGNATED FROM AGRICULTURAL)
SPECIAL MANAGEMENT AREA (SMA):	NOT WITHIN SMA
GENERAL PLAN:	COUNTY OF MAUI 2030 GENERAL PLAN
MAUI ISLAND PLAN:	WITHIN URBAN GROWTH BOUNDARY
PLANNING DISTRICT:	KAHULUI-WAILUKU COMMUNITY PLAN DISTRICT
	WITHIN GROWTH RESERVE
ZONING DISTRICT:	A-2 APARTMENT (REDESIGNATED FROM AGRICULTURAL)
FLOOD ZONE:	ZONE X
HEIGHT LIMIT (A-2):	60 FT
SETBACKS: FRONT YARD	20 FT
REAR YARD	20 FT
SIDE YARD	15 FT
MAX FAR:	90 PERCENT (565,165 SF)
PROJECT FAR:	274,736 SF
MAX LOT COVERAGE :	35 PERCENT (219,786 SF)
PROJECT LOT COVERAGE	98,828 SF

BUILDING CODE INFORMATION

APPLICABLE CODE:	INTERNATIONAL BUILDING CODE 2006 EDITION AS AMENDED
TYPE OF CONSTRUCTION:	II-B SPRINKLED
OCCUPANCY CLASSIFICATION:	R-2
ALLOWABLE BUILDING AREA PER STORY	Aa = [Al + Al x It] + [Al x Is]
	Al = 7,000
	It = 0
	Is = 2
	21,000 = [7,000 + [7,000 x 0] + [7,000 x 2]]
BUILDING TYPE I AREA PER STORY:	9,712 SF
BUILDING TYPE II AREA PER STORY:	10,032 SF

1 WAILUKU DEVELOPMENT - SITE PLAN
1" = 40'-0"

0' 10' 20' 40' 80'

CliffordPlanning and Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

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This work was prepared by me or under my supervision and construction of this project will be under my observation. (Observation of construction as defined in Section 16-115-9 of the State of Hawaii, Department of Commerce and Consumer Affairs, Hawaii Administrative Rules, for Professional Engineers, Architects, Surveyors, and Landscape Architects 10/28/91).

LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

PROJECT NAME: WAILUKU DEVELOPMENT

PROJECT NUMBER: 416.007

TITLE: SITE PLAN

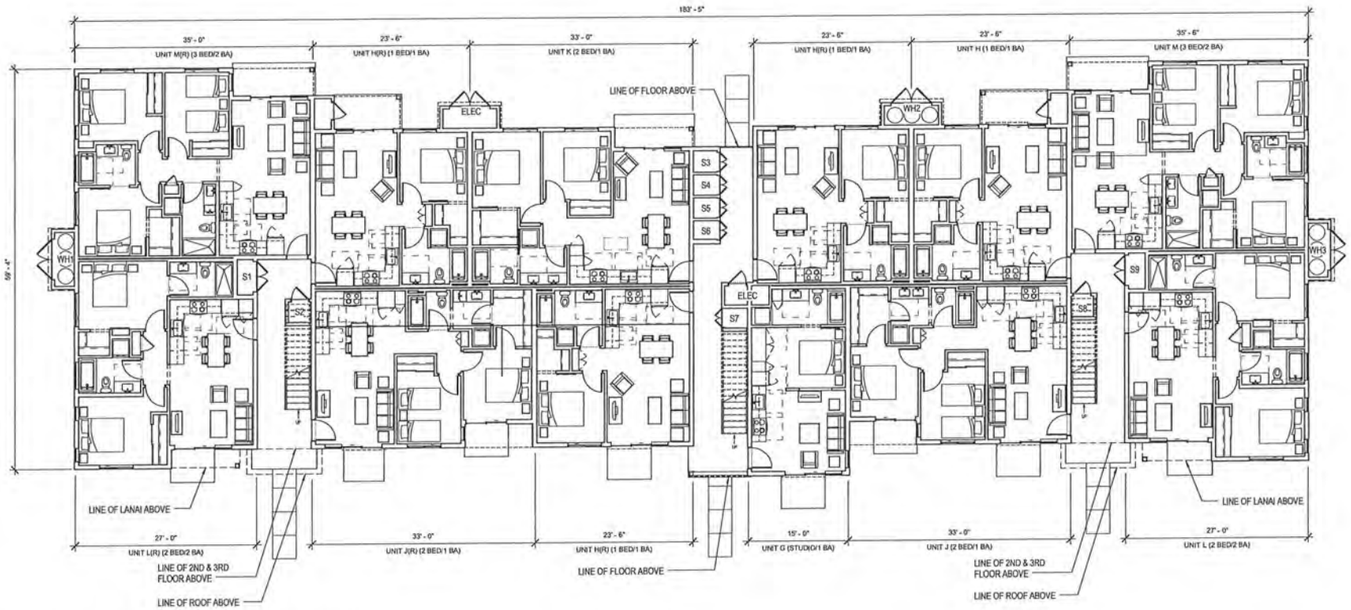
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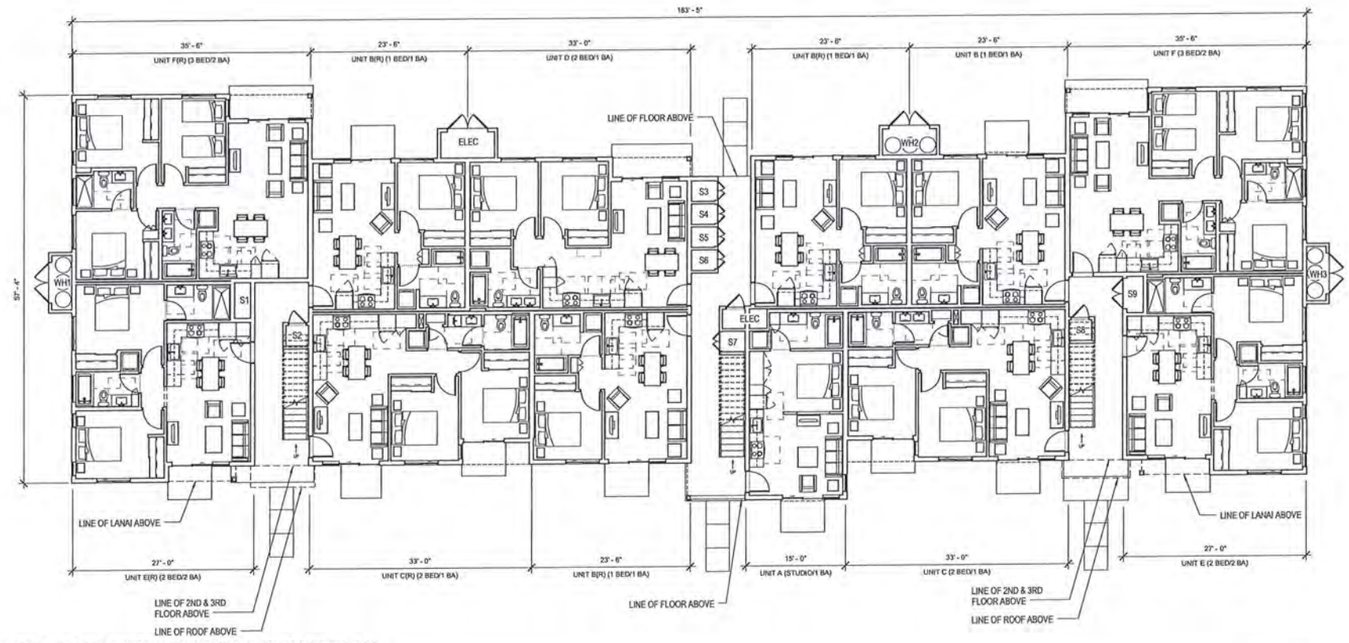
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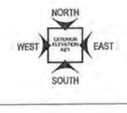
2 BUILDING TYPE II OVERALL FLOOR PLAN

1/8" = 1'-0"



1 BUILDING TYPE I OVERALL FLOOR PLAN

1/8" = 1'-0"



0' 2' 4' 8' 16'

Clifford Planning & Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

Authorization to use these plans for the issuance of a Building Permit shall be evidenced only by the appearance of the Architect's stamp below, together with the original signature of the Architect.

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE: OVERALL BUILDING PLANS

DATE: JUNE 28, 2017

SCALE: 1/8" = 1'-0" | DRAWN BY: KK/SE | CHECKED BY: JC

DRAWING NO: A101

SHEET ___ OF ___

REVISED2015
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4 NORTH ELEVATION
1/8" = 1'-0"



3 EAST ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"

0' 2' 4' 8' 16'

Clifford Planning & Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
BUILDING TYPE I ELEVATIONS

DATE: JUNE 28, 2017

SCALE:	DRAWN BY:	CHECKED BY:
1/8" = 1'-0"	KK / RY	JC

DRAWING NO:
A102

SHEET ___ OF ___

REVISIONS
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4 NORTH ELEVATION
1/8" = 1'-0"



3 EAST ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"

0' 2' 4' 8' 16'

REVISED 2015
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55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
BUILDING TYPE II ELEVATIONS

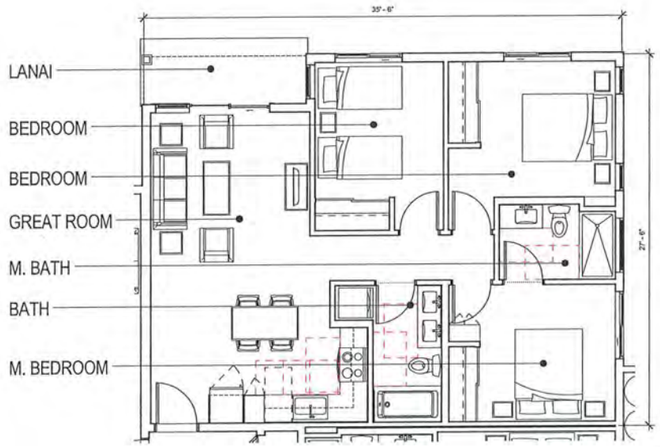
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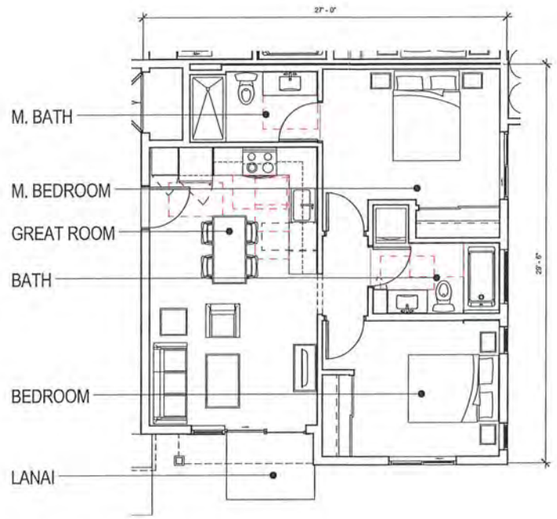
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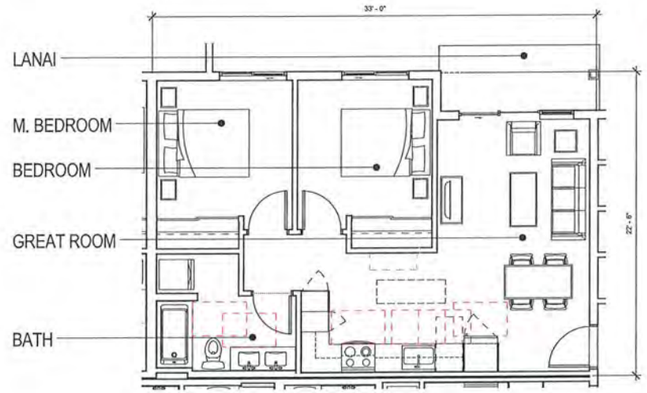
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DERIVED FROM FFHAA DESIGN GUIDELINES



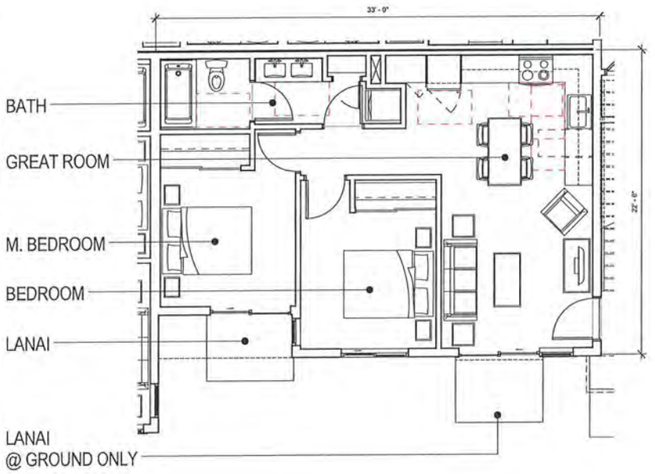
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1/4" = 1'-0"



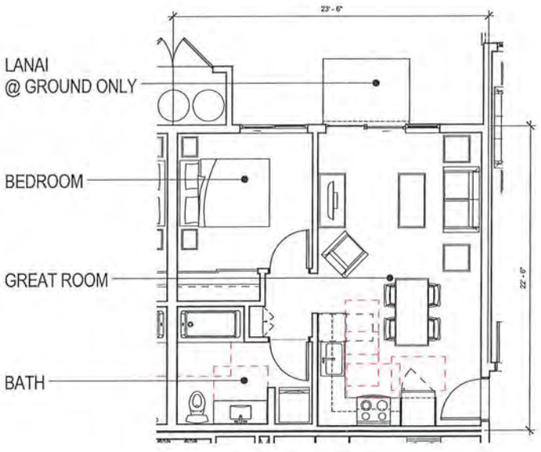
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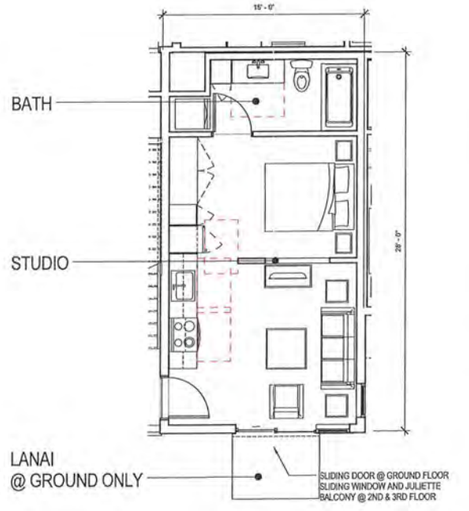
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1/4" = 1'-0"



3 UNIT C (2BD/1BA)
1/4" = 1'-0"



2 UNIT B (1BD/1BA)
1/4" = 1'-0"



1 UNIT A (STUDIO)
1/4" = 1'-0"

0' 1' 2' 4' 8'

CliffordPlanning and Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI,
HAWAII

PROJECT NAME:	WAILUKU APARTMENTS
PROJECT NUMBER:	416.007

TITLE:
BUILDING TYPE I ENLARGED UNIT PLANS

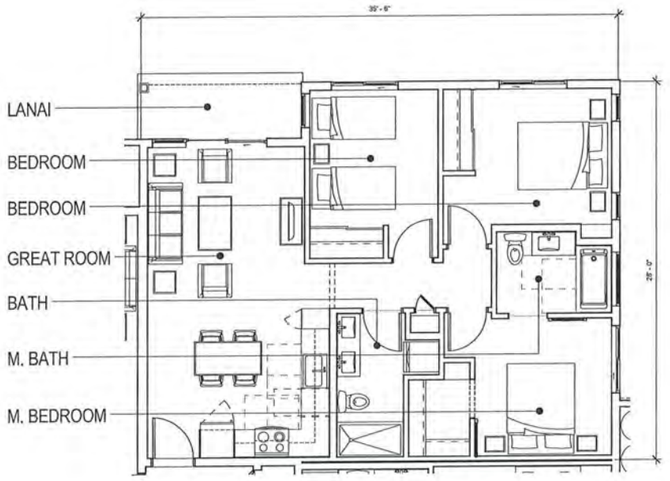
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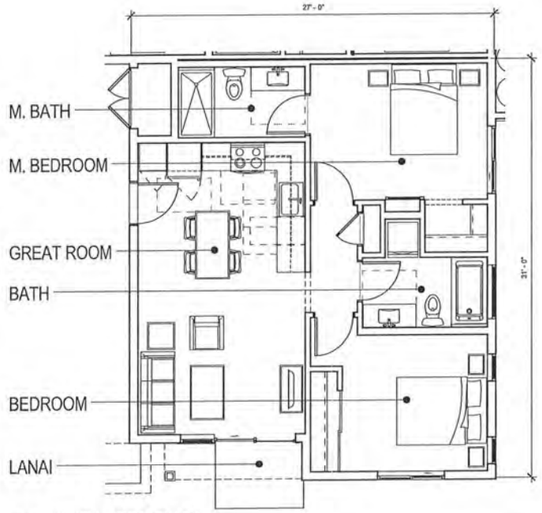
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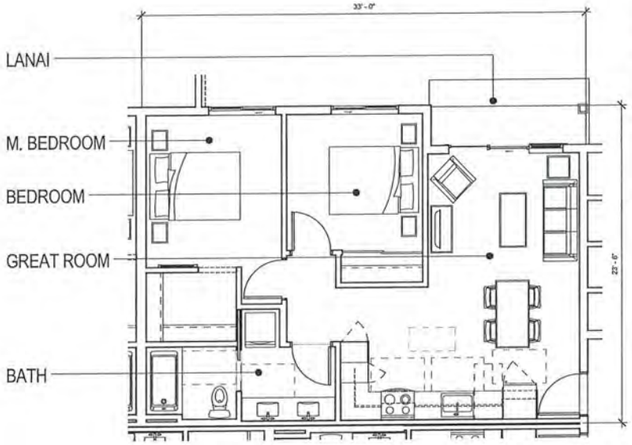
NOTE:
ALL CLEARANCES SHOWN DASHED
DERIVED FROM FFHAA DESIGN GUIDELINES



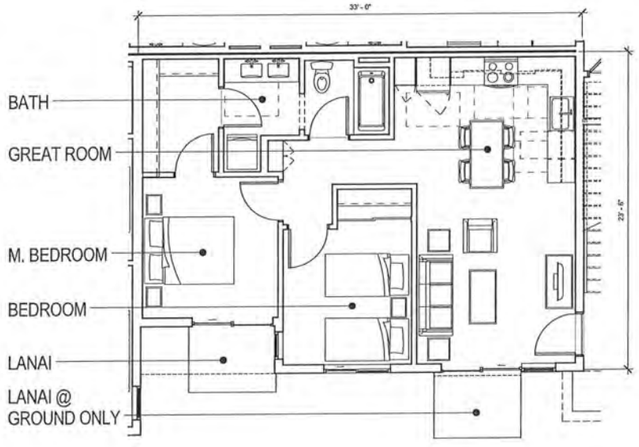
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1/4" = 1'-0"



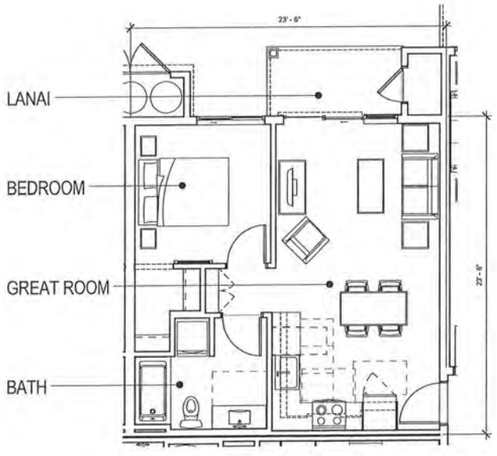
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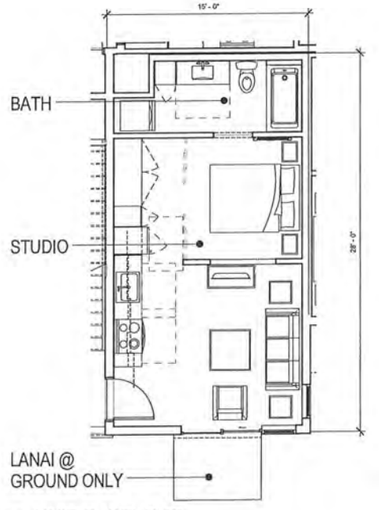
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1/4" = 1'-0"



3 UNIT J (2BD/1BA)
1/4" = 1'-0"



2 UNIT H (1BD/1BA)
1/4" = 1'-0"



1 UNIT G (STUDIO)
1/4" = 1'-0"

0' 1' 2' 4' 8'

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HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:084

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

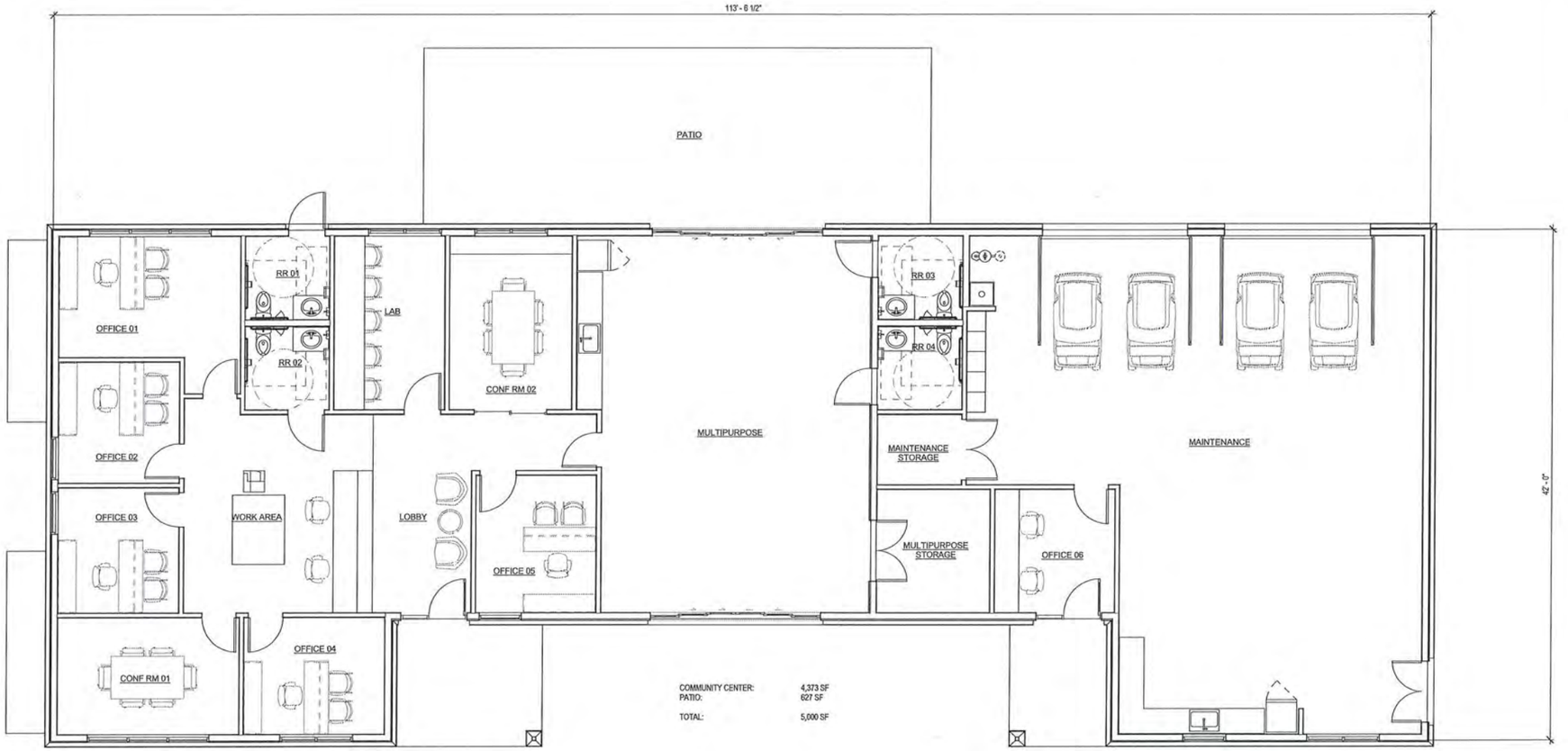
TITLE:
BUILDING TYPE II ENLARGED UNIT PLANS

DATE: JUNE 28, 2017

SCALE:	DRAWN BY:	CHECKED BY:
1/4" = 1'-0"	KK/SE	JC

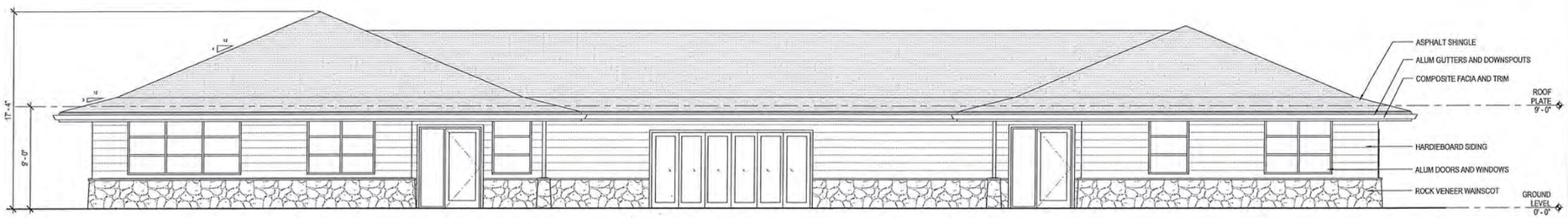
DRAWING NO:
A105

SHEET ___ OF ___



1 COMMUNITY CENTER FLOOR PLAN

1/4" = 1'-0"



2 COMMUNITY CENTER FRONT ELEVATION

1/4" = 1'-0"

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HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

PROJECT NAME:	WAILUKU APARTMENTS
PROJECT NUMBER:	416.007

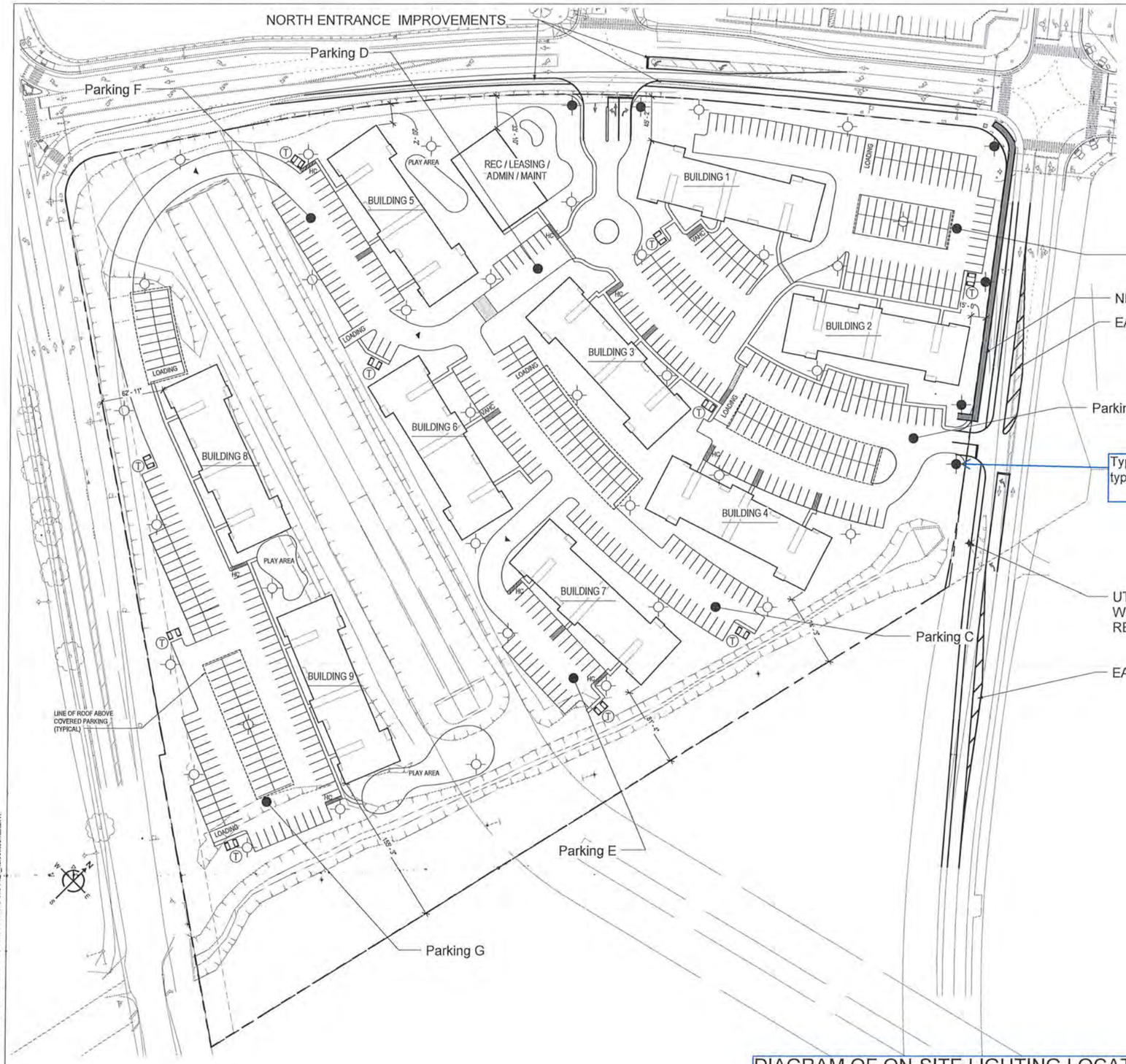
TITLE:
COMMUNITY CETNER
OVERALL FLOOR PLAN AND ELEVATION

DATE:	MARCH 09, 2018	
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DRAWING NO: A106

SHEET ___ OF ___

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SITE PLAN LEGEND

- (T) TRASH
- HC ACCESSIBLE STALLS
- V VAN ACCESS
- NEW PROPOSED PUBLIC SIDEWALK
- ON-SITE AREA LIGHTPOLES
- ON-SITE AREA LIGHTPOLES ILLUMINATING INTERSECTION OR PUBLIC SIDEWALK

DIAGRAM OF ON-SITE LIGHTING LOCATIONS & SPECIFICATIONS

1 PRELIMINARY CONCEPT SITE PLAN
1" = 40'-0"

0' 10' 20' 40' 80'

Clifford Planning & Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:
ELECTRICAL CONSULTANT: ECS, Inc.

NO.	DATE	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

PROJECT NAME:	WAILUKU WORKFORCE APARMENTS
PROJECT NUMBER:	416.007
TITLE:	PRELIMINARY SITE LIGHTING
DATE:	SEPTEMBER 7, 2017
SCALE: As indicated	DRAWN BY: RY / CHECKED BY: JC
DRAWING NO:	E100
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BUILDING TYPE I - ELEVATION

WAILUKU APARTMENTS

APRIL 28, 2017

LEGACY PARTNERS

PIER MANAGEMENT - HAWAII LLC
SCHATZ COLLABORATIVE LLC

SCALE:
NTS

Clifford Planning Architecture LLC

4/28/2017 4:39:25 PM C:\Users\sari.ellis\Documents\Wailuku Concept 4A_sari.ellis.rvt



BUILDING TYPE II - ELEVATION

WAILUKU APARTMENTS

APRIL 28, 2017

LEGACY PARTNERS

PIER MANAGEMENT - HAWAII LLC
SCHATZ COLLABORATIVE LLC

SCALE:
NTS

CliffordPlanning LLC Architecture

4/28/2017 4:39:25 PM C:\Users\sari.ellis\Documents\Wailuku Concept 4A_sari.ellis.rvt



BUILDING TYPE II - ELEVATION

SCALE: 1/8" = 1'-0"

LEGACY PARTNERS

PIER MANAGEMENT - HAWAII LLC
SCHATZ COLLABORATIVE LLC

WAILUKU DEVELOPMENT CONCEPT IV

APRIL 27, 2017

CliffordPlanning LLC Architecture

4/27/2017 2:04:57 PM C:\Users\jerome.hamman\Documents\Wailuku Concept 4_jerome.hamman.rvt

OUTLINE SPECIFICATIONS 6

Wailuku Workforce Apartments

Preliminary Outline Specifications

Wailuku, Maui

July 2017

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DIVISION 28 - ELECTRONIC SAFETY AND SECURITY 9
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DIVISION 32 - EXTERIOR IMPROVEMENTS 9
DIVISION 33 - UTILITIES 9
Appendix A 10

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

To Be Determined

DIVISION 01 - GENERAL REQUIREMENTS

To Be Determined

DIVISION 03 - CONCRETE

030130 Maintenance of Cast-In-Place Concrete

033000 Cast-In-Place Concrete

033053 Miscellaneous Cast-In-Place Concrete

033300Architectural Concrete

034500 Precast Architectural Concrete

Refer to Appendix A – S-01

035413 Gypsum Cement Underlayment

DIVISION 04 - MASONRY

042200 Concrete Unit Masonry

DIVISION 05 - METALS

051200 Structural Steel Framing

054000 Cold-Formed Metal Framing

054400 Cold-Formed Metal Trusses

055000 Metal Fabrications

055213 Pipe and Tube Railings

055313 Bar Gratings

055819 Heating/Cooling Unit Covers

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

061000 Rough Carpentry

061053 Miscellaneous Rough Carpentry

061063 Exterior Rough Carpentry

061600 Sheathing

061753 Shop-Fabricated Wood Trusses

062013 Exterior Finish Carpentry

062023 Interior Finish Carpentry

064013 Exterior Architectural Woodwork

064023 Interior Architectural Woodwork

064113 Wood-Veneer-Faced Architectural Cabinets

Refer to Appendix A – CAB-01

064216 Flush Wood Paneling

064300 Wood Stairs and Railings

064600 Wood Trim

Refer to Appendix A – TM-01, TM-02, TM-03

064800 Wood Frames

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

071113 Bituminous Dampproofing

071326 Self-Adhering Sheet Waterproofing

071800 Traffic Coatings

071900 Water Repellents

072100 Thermal Insulation

072500 Weather Barriers

072600 Vapor Retarders

073113 Asphalt Shingles

Refer To Appendix A – R-01a, R-01b

074646 Fiber-Cement Siding

075113 Built-Up Asphalt Roofing

076200 Sheet Metal Flashing and Trim

077100 Roof Specialties

077200 Roof Accessories

Refer to Appendix A – R-02, R-03

078100 Applied Fireproofing

078123 Intumescent Fireproofing

078200 Board Fireproofing

078413 Penetration Firestopping

078443 Joint Firestopping

079100 Preformed Joint Seals

079200 Joint Sealants

079219 Acoustical Joint Sealants

DIVISION 08 - OPENINGS

081113 Hollow Metal Doors and Frames

Refer to Appendix A – DR-03, DR-04, DR-05

081416 Flush Wood Doors

Refer to Appendix A – DR-08, DR-09

081433 Stile and Rail Wood Doors

Refer to Appendix A – DR-01, DR-06, DR-07

083213 Sliding Aluminum-Framed Glass Doors

085313 Vinyl Windows

Refer to Appendix A – W-01

087100 Door Hardware

088000 Glazing

088300 Mirrors

089516 Wall Vents

DIVISION 09 - FINISHES

090190.52 Maintenance Repainting

092216 Non-Structural Metal Framing

092613 Gypsum Veneer Plastering

092900 Gypsum Board

- 5/8" Type-R Glass Mat Faced Gypsum Wallboard
- 5/8" Type-X Glass Mat Faced Gypsum Wallboard
- 5/8" Type-R Gypsum Wallboard
- 5/8" Type-X Gypsum Wallboard
- 5/8" Glass Mat Water-Resistant Gypsum Backing Panel

096513 Resilient Base and Accessories

096516 Resilient Sheet Flooring

Refer to Appendix A – FL-01

096816 Sheet Carpeting

099113 Exterior Painting

Refer to Appendix A – PT-01, PT-02, PT-03

099113 Interior Painting

Refer to Appendix A – PT-10, PT-11, PT-12, PT-13

099646 Intumescent Painting

099653 Elastomeric Coatings

Refer to Appendix A – EL-01

DIVISION 10 - SPECIALTIES

101300 Directories

101416 Plaques

101419 Dimensional Letter Signage

101423 Panel Signage

101423.16 Room-Identification Panel Signage

101426 Post and Panel/Pylon Signage

101473 Painted Signage

101700 Telephone Specialties

102600 Wall and Door Protection

102800 Toilet, Bath, and Laundry Accessories

Refer to Appendix A – Bath Accessories

102819 Tub and Shower Enclosures

Refer to Appendix A – SH-02, SH-04

104413Fire Protection Cabinets

104416Fire Extinguishers

104513 Photoluminescent Egress Path Markings

105500.13 Usps-Delivery Postal Specialties

105500.16 Private-Delivery Postal Specialties

DIVISION 11 - EQUIPMENT

113013 Residential Appliances

Refer to Appendix A – Appliances

DIVISION 12 - FURNISHINGS

123530 Residential Casework

123661.16 Solid Surfacing Countertops

Refer to Appendix A – SS-01

DIVISION 21 - FIRE SUPPRESSION

210513 Common Motor Requirements for Fire Suppression Equipment

210517 Sleeves and Sleeve Seals for Fire-Suppression Piping

210518 Escutcheons for Fire-Suppression Piping

210523 General-Duty Valves for Fire Protection Piping

210548.13 Vibration Controls for Fire-Suppression Piping and Equipment

210553 Identification for Fire-Suppression Piping and Equipment

210700 Fire-Suppression Systems Insulation

211100 Facility Fire-Suppression Water-Service Piping

211116 Facility Fire Hydrants

211119 Fire Department Connections

211200 Fire-Suppression Standpipes

211213 Fire-Suppression Hoses and Nozzles

211313 Wet-Pipe Sprinkler Systems

213413 Pressure-Maintenance Pumps

DIVISION 22 - PLUMBING

220513 Common Motor Requirements for Plumbing Equipment

220516 Expansion Fittings and Loops for Plumbing Piping

220517 Sleeves and Sleeve Seals for Plumbing Piping

220518 Escutcheons for Plumbing Piping

220519 Meters and Gages for Plumbing Piping

220523.12 Ball Valves for Plumbing Piping

220523.13 Butterfly Valves for Plumbing Piping

220523.14 Check Valves for Plumbing Piping

220523.15 Gate Valves for Plumbing Piping

220529 Hangers and Supports for Plumbing Piping and Equipment

220548.13 Vibration Controls for Plumbing Piping and Equipment

220553 Identification for Plumbing Piping and Equipment

220716 Plumbing Equipment Insulation

220719 Plumbing Piping Insulation

221113 Facility Water Distribution Piping

221116 Domestic Water Piping

221119 Domestic Water Piping Specialties

221313 Facility Sanitary Sewers

221316 Sanitary Waste and Vent Piping

221319.13 Sanitary Drains

221429 Sump Pumps

223300 Electric, Domestic-Water Heaters

224100 Residential Plumbing Fixtures

Refer to Appendix A - Plumbing

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITINING (HVAC)

To Be Determined

DIVISION 26 - ELECTRICAL

To Be Determined

DIVISION 27 – COMMUNICATIONS

To Be Determined

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

To Be Determined

DIVISION 31 - EARTHWORK

311000 Site Clearing

312000 Earth Moving

312319 Dewatering

313116 Termite Control

DIVISION 32 - EXTERIOR IMPROVEMENTS

321216 Asphalt Paving

321313 Concrete Paving

321713 Parking Bumpers

323113 Chain Link Fences and Gates

323223 Segmental Retaining Walls

323300 Site Furnishings

328400 Planting Irrigation

329113 Soil Preparation

329300 Plants

DIVISION 33 - UTILITIES

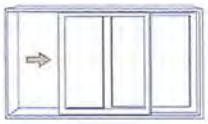
To Be Determined

Appendix A

Project: Waikulu Workforce Apartments
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
EXTERIOR					
DR-01		Entry Doors	Jeldwen Windows & Doors Craftsman Collection, Finish: Mahogany, Color: Cashmere, Glass: Waterglass, Fiberglass Door, Panel Design: Craftsman Item#: A362 Door	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
DR-02		Lanai Doors	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, 2 Panel Patio Door, screen door standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type C; See Door Scedule
DR-03		Exterior Closet Doors	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type G; See Door Scedule
DR-04		Exterior Washer/Dryer Door	Simpson Door Company Plantation Louver door, Solid Core door, Finish/color: Sapele Mahogany Item# 8482	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type F; See Door Scedule
DR-05		Electrical Closet Door	Pella Fiberglass Door Finish: Mahogany grain Color: TBD, Double swing door, Size: 7'-0"W x 6'-8"	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type H; See Door Scedule
DR-06		Interior Door	Simpson Door Company Ovation layered panel doors, 87101, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type B; See Door Schedule

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
DR-07		Interior Door/ADA at Closet	Jeldwen Windows & doors Plantation Louver doors & BifoldPatio Door, 2-1/4" Slats, Finish: Primed, Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type K; See Door Schedule
DR-08		Interior Sliding Closet Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type D; See Door Schedule
DR-09		Interior Pocket Door	Jeldwen Windows & doors ProCore Solid Core, Flush panelPatio Door, Finish: Smooth for Painting Color: TBD	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type J; See Door Schedule
W-01		Windows	Milgard Windows & Doors Montecito Series vinyl Windows & Doors, Horizontal Slider window, screen standard mesh, SunCoat Low-E glass, Edgegard spacer, Interior Door handle color: white, Exterior Vinyl Finish color: white	One Stop Windows & Doors Rick Goslin P: 808-550-2402 E: rickg@onestopwd.com	Or Equal Type A; See Door Scedule
PT-01		Exterior Door		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
PT-02		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
PT-03		Exterior Paint		Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD
SD-01		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Mountain Sage	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-02		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 4", Texture: Cedarmill, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
SD-03		Lap Siding	James Hardie, Hardie Plank Lap Siding, 5/16 in., 12 ft. planks, 8", Texture: Cedarmill, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-01		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Autumn Tan	David Fukumoto P: 808-783-4975	Touch up paint to match.
TM-02		Exterior/Window/Door Trim	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 3.5"W, Color: Navajo Beige	David Fukumoto P: 808-783-4975	Touch up paint to match.

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
TM-03		Belly Band	James Hardie, Hardie Trim, 4/4 Rustic Grain, 12ft. Boards, 11.25"W, Color: Cobble Stone	David Fukumoto P: 808-783-4975	Touch up paint to match.
EL-01		Entry Lanai	Pacific Polymers Elasto - Deck 5000 x 2, Polyurethane coating, 2 coating layers, Color: Pumice	Walsh and Company John Walsh P: 808-286-7283 E: john@walshandcompanyhi.com	
S-01		Stair Step Tread	Step Stone, Inc. Calarc Steptreads, Classic Profile, Color: CR BS 504, French Gray	Building Systems Hawaii Bruce Buckman P: 1-808-885-0987 E: bystems@kona.net	
R-01a		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, CRRC Product ID 0668-0050, Energy Star, Color: Max Def Weathered Wood	Michael Bahrou P: 808-352-6965 E: michael.c.bahrou@saint-gobain.com	
R-01b		Roof	CertainTeed LandMark Solaris Gold, Solar Reflective Shingles, Energy Star, Color: Max Def Resawn Shake	Michael Bahrou P: 808-352-6965 E: michael.c.bahrou@saint-gobain.com	
R-02		Attic Vent	O'hagin Superior Attic Products O'hagin Attic vent for Composition shingleItem#: Color: Pre-painted (TBD), 72 SI NFVA	HPM Building Suppy P: 808-682-8560 E: oahu@hpmhawaii.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
R-03		Ridge Ventilation	Cor-A-Vent, Inc. Cor-A-Vent, Style: Ridge Ventilation System, Color: Black, Item#: V-300	HPM Building Suppy P: 808-682-8560 E: oahu@hpmhawaii.com	
APPLIANCES					
APP-01		Kitchen	Refrigerator Whirlpool 18.2 cu. ft. Top Freezer Refrigerator, Color: White; Size: 29-3/4"W x 33 1/2"D x 65-7/8" H Item#: WRT138FZDW	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
APP-02		Kitchen	Refrigerator Ice Maker Whirlpool Automatic Ice Maker Kit, Color: White, Item#: ECKMF95	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-03		Kitchen	Range & Cord Whirlpool 4.8 cu. Ft, Guided Electric Front Control Coil Range, Color: White; Size: 29 7/8"W x 29 15/16"D x 36" H, Item#: WEC310S0FW, Range Cord: EZ-Flo, Item#: E61245	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-04	TBD	Kitchen	Ducted Range Hood 30" Range Hood	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	TBD
APP-05		Laundry Room	Washer & Cord Whirlpool Electric Range Cord, 1.9 cu. ft., Compact Washer w/ Detergent Dosing Aid, Color: White; Size: 24"W x 24"D x 33 1/4" H, Item#: WWFW3090GW, Washer Cord: Proflo, Item#: PFWMH6PR	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
APP-06		Laundry Room	Dryer & Cord Whirlpool 4.3 cu. ft., Compact Dryer, Color: White; Size: 24"W x 25 3/4"D x 33 5/8" H, Item#: WWHD3090GW, Dryer Cord: EZ-Flo, Item#: E61253	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star

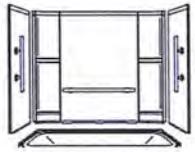
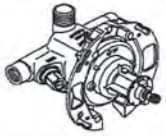
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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
APP-07		Laundry Room	Washer/Dryer Stack Kit Whirlpool Stack Kit - 24", Color: White, Item#: W10882520	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
APP-08		Laundry Room	Washer/Dryer ADA Unit Laundry Room Summit 24" Wide Washer/Dryer Combo for non-vented use, with 15 lbs. wash capacity, 2 cu. ft. drum, Color: White; Size: 23.38"W x 24.25"D x 33.25" H, Item#: SPWD2200W	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	Energy Star
PLUMBING					
WC-01		Bathrooms	Toilet @ Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl Windham White, Item #: S4032150, Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item#: S4045510 Kohler, QR EB Closet Seat Brevia White, Item#:K4774-0	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
WC-02		Bathrooms	Toilet @ ADA Unit Bathrooms Sterling/Kohler Sterling, 12 Elongated Bowl ADA Windham White, Item #: S4033150 Sterling, Windham Closet Tank White 1.28 Gallons per flush, Item #: S4045510, Kohler, QR EB Closet Seat Brevia White	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-01	TBD	Bathrooms	Lavatory @ Unit Bathrooms Cultured Marble Vanity Top	Naka's Marble Co. LLC P: 808-841-5434 E: nakasmarblehawaii.com	TBD
LAV-02		Bathrooms	Lavatory @ Unit Bathrooms Sterling Stinson UC Lav White Item #: S442007UO	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
LAV-03		Bathrooms	Lavatory @ ADA Unit Bathrooms Pedestal Sterling 4 VC PED Lav Bowlsacram White PED Onlysacram White Item #: S4461240 (Bowl) & S4481200 (Pedestal)	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LAV-04		Bathrooms	Lavatory @ ADA & Unit Bathrooms Kohler Lavatory Faucet, Polished Chrome 1.5 Gallon Per minute 2 Handle Center Set Item #: K5316-4-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-01		Bathrooms	Tub/Shower @ ADA & Unit Bathrooms Sterling 60x30 LF Vikrell Bath Accord White Item #: S711411100	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-02		Bathrooms	Tub/Shower Enclosure @ Unit Bathrooms Sterling Smooth Comp Wall Setaccord White Item #: S712441000	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-03		Bathrooms	Tub/Shower Fixtures @ Unit & ADA Bathrooms Kohler Refinia, CCY 2.5 Handle, Tub and Shower Trim Only Polished Chrome Item #: K-T5318-4-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
SH-04		Bathrooms	Tub/Shower Enclosure @ Unit ADA Bathrooms Sterling Accord 60x30 Wall Set with Grab Bars Item #: S71244103V0	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-05		Bathrooms	Tub/Shower Enclosure @ Unit ADA Bathrooms Accord 36"x36" Shower with Grab Bars Item #: 72240103-V	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-06		Bathrooms	Tub/Shower Drain 2" Brass Self-Caulking Drain Item #: PF140NC	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-07		Bathrooms	Tub/Shower Pressure Balance Valve Kohler 2.5 Gallons Per Minute Wall Mount Pressure Balance Valve Rite -Temp Item #: KP304-KS-NA	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
SH-08		Bathrooms	Tub/Shower Bath Drain Plastic Tubular Proflo W & O Plastic Tubular, 1-1/2" Plastic Tubular, Trip Lever, ADJ, Chrome Plated Trim Item #: PFWO402	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
K-01		Kitchen	Sink @ Kitchen Sterling Southhaven, Top Mount Kitchen Sink, single hole faucet with escutcheon plates, 25"X 22"x 8"Bowl Depth, Stainless Steel Item #: S114053NA	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
K-02		Kitchen	Sink @ ADA Kitchen Sterling Southhaven, Top Mount Kitchen Sink, single hole faucet with escutcheon plates, 25"X 22"x 6-1/2"Bowl Depth, 1B, SGL PK, Stainless Steel Item #: S114033NA	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
K-03		Kitchen	Faucet @ ADA & Unit Kitchen Kohler Simplice, Pull-Down Kitchen Sink Faucet, CCY Lead Law Compliant, 1.8 gpm, Polished Chrome Item #: K596-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
K-04		Kitchen	Garbage Disposal In Sink Erator (ISE) 1/2 HP Garbage Disposal w/Cord Item #: IBADGER5WC	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
BATH ACCESSORIES					
ACC-01		Bathrooms	Towel Bar Kohler Alteo, 24 Towel Bar, Polished Chrome Item #: K37051-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-02		Bathrooms	Toilet Tissue Holder Kohler Alteo, Pivoting Tissue Holder, Polished Chrome Item #: K37054-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-03		Bathrooms	Robe Hook Kohler Alteo, Robe Hook, Polished Chrome Item #: K37055-CP	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-04		Bathrooms	Shower Rod Kohler Expanse, Curved Shower Rod - Traditional Design, Polished Stainless Item #: K-9349-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
ACC-05		ADA Bathrooms	12" Grab Bar Kohler Contemporary, 12" grab bar, Color: Polished Stainless, Item #: K-14560-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-06		ADA Bathrooms	24" Grab Bar Kohler Contemporary, 24" grab bar, Color: Polished Stainless, Item #: K-14562-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-07		ADA Bathrooms	36" Grab Bar Kohler Contemporary, 36" grab bar, Color: Polished Stainless, Item #: K-14564-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
ACC-08		ADA Bathrooms	42" Grab Bar Kohler Contemporary, 42"grab bar, Color: Polished Stainless, Item #: K-10545-S	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
LIGHTING					
LM-01		Hallway, Kitchen Sink, & Bath	Nora/Nspec Lighting 6" LED Opal Series, Surface mounted light fixture, Finish: TBD, Size: 7 1/4"W x 2 1/2"H, Model # NLOP-R650930A	Nora Lighting E: www.noralighting.com	Energy Star
LM-01NL		Common Entry NL	Liton Round ceiling downlight, Finish: TBD, Size: 5 11/16"W x 4 ¾"H, Model # DL360	Liton P: 800-515-4880 E: www.liton.eemagroup.com	Energy Star
LM-02		Kitchen	E Lighting Ceiling mount, Finish: Frosted glass Color: TBD, Size: 13"W x 5"H, Model # 4372	Dimensions Electrical Inc. Dorene Martin P: 808-955-6111 E: dmartin@dimensionselectrical.com	Energy Star

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SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
LM-04		Bathroom Vanity	E Lighting Wall mount, Finish: Frosted checkered glass Color:TBD, Size: 20 1/2"W x 7"H x 4" Ext, Model # 6833	Dimensions Electrical Inc. Dorene Martin P: 808-955-6111 E: dmartin@dimensionselectrical.com	Energy Star
LM-06		Lanai	Liton Round ceiling downlight, Finish: TBD, Size: 5 11/16"W x 4 ¾"H, Model #: DL360	Liton P: 800-515-4880 E: www.liton.eemagroup.com	Energy Star
LM-07		Stair NL	Brownlee Lighting Wall mounted light Fixture, Finish: Standard Bronze polyester powder coat, Size: 11"W x 5.75"H x 8.5"D, Model #: 7046 LED	Brownlee Lighting P: 800-318-6768 E: www.rownlee.com	Energy Star
EF-01		Ground Floor Bathrooms	Greenheck, Toilet Exhaust, Model #: SP-B80	Greenheck P: 715-359-6171 E: www.greenheck.com	Or Equal
EF-02		Second Floor Bathrooms	Greenheck, Toilet Exhaust, Model #: SP-B70	Greenheck P: 715-359-6171 E: www.greenheck.com	Or Equal
FN-01		Interior	Minka Aire Contractor 52 Ceiling Fan, Finish: White, Item #: F547-WH	Ferguson Clayton Gomi P: 808-832-7419 E: Clayton.Gomi@Ferguson.com	
E-01		Kitchen Receptical	Leviton USB Dual Charger Receptacle - White, 15 AMP Item #: Leviton T5632-W	Levition P: 800-323-8920 E: www.leviton.com	
INTERIOR FINISHES					

Project: Waikulu Workforce Apartments
Design: Clifford Planning & Architecture LLC
Details: New Construction
Date: July 14, 2017

SPEC #	IMAGE	LOCATION	DESCRIPTION	VENDOR	COMMENTS
FL-01	TBD	Flooring	Vinyl	Pro Source Vinda Campos P: 808-423-0927 E: vinda.campos@prosourcehon.com	TBD Moisture Test Required
SS-01	TBD	Counter Tops	Cultured Marble	Naka's Marble Co. LLC P: 808-841-5434 E: nakasmarblehawaii.com	TBD
CAB-01	TBD	Cabinets	Wood Cabinets	C & C Cabinets Jackie He P: 808-853-2088 E: jackie@cccabinetsgranite.com	TBD
PT-10		Interior Paint	Sherwin-Williams, Item#: SW 7566 Westhighland White	Wes Ka'ili P: 808-842-4000 E: swrep7873@sherwin.com	TBD

SECTION 201H-38, HAWAIʻI REVISED STATUTES EXEMPTION LIST

7

SUMMARY OF EXEMPTIONS Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption and Estimated Value Where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
1. Requirement for General plan and Community Plan land use consistency	Title 2, Maui County Code, Administration and Personnel	**MCC 2.80B General Plans and Community Plans.** An exemption from Chapter 2.80B, MCC, General Plan and Community Plans, to permit the project to proceed without obtaining a community plan amendment. Section 2.80B.070 sets out the requirements for and establishes the nine (9) community plans for the County. The subject property is designated "Future Growth Reserve" in the Wailuku-Kahului Community Plan Map. The appropriate land use designation for the proposed project is "Multi-Family". As such, an exemption from the requirements for a Community Plan Amendment (CPA) is sought in order to expedite the development of the affordable rental units and meet affordable rental target thresholds.	Maui County Dept. of Planning expressed no objection to this proposed exemption.	This exemption would expedite the delivery of affordable workforce housing. The current site is designated as "Urban Growth" in the Maui Island Plan.
2. Requirement for planting of street trees	Title 12, Maui County Code: Streets, Sidewalks, and Public Places Section 12.24A.070 - Planting of Street Trees Maui County Planting Plan Chapter 2	**MCC 12.24A Landscape Planting and Beautification.** An exemption from the requirements for the required number, species and location of street trees along Honoapi'ilani Highway, Wa'iale Road and Ku'ikahi Drive. Instead, landscaping to be provided in accordance with the Conceptual Landscape Plan prepared by Landscape Architect Russell Y. Gushi and attached hereto as **Exhibit "1"**. Estimated Value: $9,600	Maui County Dept. of Parks and Recreation (DPR) and Dept. of Public Works (DPW). DPR expressed no concerns. DPW noted that trees along the project frontage may pose a maintenance issue.	This exemption allows the development the flexibility to create an attractive streetscape in a cost-effective manner. It also creates flexibility in location of trees.
3. Requirement for payment of wastewater assessment fees	Title 14, Maui County Code: Wastewater Assessment Fees for the Wailuku/Kahului Wastewater Treatment System	**MCC 14.35 Wastewater Assessment Fees for Facility Expansion for the Wailuku/Kahului Wastewater Treatment System.** Exemption to allow the project to receive its building permits without the need to pay wastewater assessment fees for the project in its entirety. Although Section 14.35.080, pertaining to Exemptions, exempts County housing projects and facilities from the provisions of this chapter, the project is privately funded with 60% of the units falling within the affordability parameters of Chapter 2.96. This exemption clarifies that the applicant is seeking a waiver from the need to pay wastewater assessment fees for the entire 324 units of the project. Estimated Value: $377,460	Maui County Department of Environmental Management in their September 15, 2017 comment letter stated that the project would not be subject to wastewater assessment fees. However, this exemption has been included to ensure clarification that wastewater assessment fees are waived.	An exemption from the requirements to pay the wastewater assessment fee for the Wailuku/Kahului Wastewater Treatment System will advance the affordability objectives of the project.

SUMMARY OF EXEMPTIONS Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption and Estimated Value Where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
4. Requirement for payment of permit and inspection fees	Title 16, Maui County Code: Buildings and Construction Section 16.04C, 16.18B, 16.2B, 16.26B	**MCC Title 16 Building and Construction**. Exemptions from MCC Chapters: • 16.04C, Fire Code, • 16.18B, Electrical Code, • 16.20B, Plumbing Code, and • 16.26B, Building Code, to exempt the project from fire, electrical, plumbing, and building permit, plan review, and inspection fees. Estimated Value: • Fire Code: $61,110 • Electrical Code: $58,816 • Plumbing Code: $100,737 • Building Code: $611,020[1]	Maui County Dept. of Fire & Public Safety and Dept. of Public Works The Dept. of Fire and Public Safety noted that the subject fees are collected as a bundle. Accordingly, Fire Code fees will be exempted if exemptions to electrical, plumbing, and building fees are approved. The Dept. of Public Works had no concerns.	These exemptions provide savings to ensure the project is financially feasible. The project intends to meet all inspection and code requirements.
5. Requirements for offsite public street frontage improvements: pavement widening; installing curbs, gutters and sidewalks.	Title 16, Maui County Code: Buildings and Construction Section 16.26B.3600 - Chapter 36: Improvements to Public Streets	**MCC 16.26B Building Code.** Section 16.26B.3600 Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemption will be sought for construction of curbs and gutters along Kuʻikahi Drive, Waiʻale Road, and Honoapiʻilani Highway, provided that improvements shall be provided as shown on **Exhibits "2A"** and **"2B"** attached hereto.	Maui County Dept. of Public Works commented that the Department generally does not support this exemption request, but stated that this does not preclude the applicant from seeking the exemption from the County Council.	This exemption will allow the development to avoid the expense of constructing widened pavements, curbs and sidewalks along Kuʻikahi Drive, Waʻiale Road, and Honoapiilani Highway in non-essential locations where such improvements would offer little benefit to project residents. The project intends to install an at-grade sidewalk and bike lane along Kuʻikahi Drive and Waʻiale Road.

[1] Includes review and permit fee based on $70 million estimated cost to construct the project

SUMMARY OF EXEMPTIONS Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption and Estimated Value Where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
6. Requirement for payment of park assessment fee	Maui County Code Chapter 18.16.320 (I)(5) – Park Assessment Fee	**MCC18.16.320 Parks and Playgrounds.** Pursuant to Section 18.16.320(I)(5) Park Assessment Fees are exempt for workforce housing projects. As sixty percent of the proposed project involves workforce housing units, this portion of the project is exempt from payment of the parks and playgrounds assessment fee. Nevertheless, the proposed project also includes four (4) small parks/playgrounds improvements that vary between 1,200 sq. ft. and 2,000 sq. ft. in size, as shown on **Exhibit "3"** attached hereto. As such, an exemption for the parks and playground assessment fee will be sought for the market portion of the project (i.e. 40 percent of the total units) since provisions for parks and playgrounds will be provided onsite. Estimated Value: $1,782,000	Maui County Dept. of Parks and Recreation expressed no concern with this request.	This exemption will allow the development to reduce its costs to indirectly subsidize 195 affordable workforce rental units. The area also includes five county parks for residents within a 2-mile radius. The project also includes four children play areas that act as internal parks within the project totaling approximately 16,823sf of area.
7. Requirement to obtain a change of zoning and community plan amendment	Title 18, Maui County Code Section 18.04.030, Section 18.16.020	**MCC 18.04 General Provisions and 18.16.020 Compliance.** An exemption from Section 18.04.030, MCC, Administration, and related land use consistency and conformity requirements of Title 18, to exempt the project from obtaining a change in zoning and/or community plan amendment to enable subdivision approval. An exemption from MCC 18.16.020 to exempt the project from General Plan conformity requirements.	Maui County Dept. of Planning Department expressed no concerns or objections.	This exemption would expedite the delivery of affordable workforce housing. The current site is designated as "Urban Growth" in the Maui Island Plan area.
8. Requirement for offsite public street frontage improvements curbs, gutters, sidewalks, and bike connectivity	Title 18, Maui County Code Sections 18.20.040, 18.20.070, 18.20.080	**MCC 18.20 Subdivision Improvements.** Exemption from Sections 18.20.040, 18.20.070 and 18.20.080, MCC, as they relate to the urban standards for curbs, gutters, and sidewalks shall be granted for the portions of the Project adjacent to Waʻiale Road and Kuʻikahi Drive. Instead the project will provide an at-grade sidewalk and bike path along Waʻiale Road and Kuʻikahi Drive with a raised asphalt curb painted white to delineate the pedestrian safety zone, as shown on **Exhibits "2A"** and **"2B"** attached hereto. Estimated Value: $167,850	Maui County Dept. of Public Works commented that the Department generally does not support this exemption request, but stated that this does not preclude the applicant from seeking the exemption from the County Council.	Figure 2-2 of **Appendix "B"** depicts a painted asphalt curb between the main pavement and the pedestrian sidewalk on Waʻiale Road and Kuʻikahi Drive. Note that the actual physical distance between the proposed sidewalk and the outer edge of the southbound vehicle lane on Waʻiale Road will be 9 feet or more, while the distance between the edge of the travel way and sidewalk on Kuʻikahi Drive is 10 feet. These horizontal separation

SUMMARY OF EXEMPTIONS Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption and Estimated Value Where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
				distances provide for pedestrian safety.
9. Requirement to obtain a change of zoning and to allow the use of the A-2, Apartment District zoning standards.	Title 19, Maui County Code: Zoning Section 19.12, Apartment District	**MCC 19.30A, Agricultural District.** An exemption from Chapter 19.30A, MCC, is sought to permit the development and use of the property for multi-family residential use, recreational uses and structures, and accessory uses according to the permitted uses, accessory uses and buildings, and development standards of the A-2, Apartment District pursuant to the provisions set forth in Chapter 19.12, Apartment District with one exception: a utility shed will be located within the setback area, in the location shown on the plans submitted with the 201H application, approximately ten (10) feet from the property boundary.	Maui County Planning Department recommended this exemption in their letter dated May 31, 2018	Enables the project to be developed in accordance with the A-2, Apartment District zoning provisions, except for the utility shed encroachment along Waiʻale Road.
10. Requirement to install walls, fences, and landscaping of one (1) shade tree at minimum regular intervals for every five (5) spaces shall be provided within parking areas.	Chapter 19.36A.070.A Maui County Planting Plan, Chapter 4	**MCC 19.36A, Off-street Parking**. An exemption from Section 19.36A.070 Walls, Fences and Landscaping to allow for the flexibility in the placement of fences and shade trees as set out in the proposed conceptual site plan.	Maui County Dept. of Planning expressed no concerns with this exemption.	The project site is bordered on three sides with streets (Honoapiʻilani Hwy, Kuʻikahi Drive and Waʻiale Road) and is unique to the property by having two front yards. The fourth property boundary abuts an existing Urban District along the southern property boundary. The conceptual landscape plan will install landscape planting strips along all three roadways and along the southern boundary in accordance with the Conceptual Site Plan (Figure 3). Flexibility in the spacing of the landscape trees within the project will enhance visual screening of the project from the public street, as well as to provide shade. Strict adherence to MCC and the Maui County Planting Plan may not be possible.

SUMMARY OF EXEMPTIONS Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption and Estimated Value Where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
11. Requirements for processing of a DBA request	Section 19.68.10 Purpose; Section 19.68.020 Applications, Section 19.68.030 Procedures; Section 19.510 Application and Procedures; County Charter Chapter 8, Department of Planning.	**MCC 19.68 State Land Use District Boundaries; MCC 19.510 Application and Procedures; County of Maui Charter, Chapter 8 of Article 8, Department of Planning.** Each of the foregoing provisions of the MCC and County Charter sets forth specific procedures for the processing of a State District Boundary Amendment (DBA) for parcels having a land area of 15-acres or less. The Applicant is seeking exemptions from the foregoing provisions of the MCC and County Charter to enable the DBA request to proceed directly to the Maui County Council. Accordingly, the DBA request will not be subject to the requirement for preparation of a DBA application as required by code, and will not require processing through the Maui Planning Commission. Instead, review and comment on the DBA request is being addressed through the Chapter 343, HRS process and the Section 201H process.	Maui Planning Department expressed no concerns on these proposed exemptions.	The exemptions will enable the expedited processing of the DBA request by allowing the request to proceed directly to the Maui County Council for review and approval by ordinance. The intent of the exemptions is to expedite the processing of the DBA by removing the requirements for application documentation, noticing, Maui Planning Commission hearing and related procedural matters which would otherwise delay the processing of the DBA. The Chapter 343, HRS and Section 201H processes provide an opportunity for public and agency review of the proposed action. The County Council will conduct its review and decision-making of the project through its standard process which will also provide for public and agency input.



PRELIMINARY LANDSCAPE PLAN

0 50 150

50 25

NORTH
Scale: 1" = 50' - 0"

NOTE: ALL LANDSCAPE PLANTING AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM UTILIZING WATER AND ENERGY CONSERVING EQUIPMENT AND PRACTICES.

PRELIMINARY PLANT LIST:

1. LARGE SHADE TREES: (35' Canopy or Larger)
   e.g.: Kukui
   Kamani
   Koa
2. MEDIUM-SIZED SHADE TREES: (35' Canopy Max.)
   e.g.: Kou
   Manele
   Ho'awa
3. SMALL TREES: (16' Canopy Max.)
   e.g.: 'Ohi'a
   Hala
   Koai'a
   Alahe'e
4. LARGE SPECIMEN SHADE TREE:
   e.g.: Monkeypod (Existing Onsite tree to be relocated)
5. SINGLE-TRUNKED PALMS:
   e.g.: Coconut
   Loulu
6. MULTI-TRUNKED PALMS:
   e.g.: Areca
   MacArthur
7. SHRUBS:
   e.g.: A'ali'i
   Anapanapa
   Blue Vitex
   Nanu
   Koki'o Ke'oke'o
   'Ulei
   Beach Naupaka
   Pikake
   Ma'o Ma'o Hau Hele
   Kulu'i
8. GROUND COVERS:
   e.g.: 'Ilima papa
   Nehe
   Kupukupu Fern
   Pili Grass
   Pohinahina
   Naio Papa
   'Uki'uki
9. GRASSES:
   e.g.: Hybrid Bermuda
   El Toro Zoysia

EXHIBIT "1"

RUSSEL Y. GUSHI
ASLA
LANDSCAPE ARCHITECT

P.O. BOX 2291
WAILUKU, MAUI, HAWAII 96793
TEL.: (808) 242-6593
e-mail: yoshigushi@hawaii.rr.com

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS

LICENSE EXPIRES: APRIL 30, 2018

WAILUKU WORKFORCE APARTMENTS
TMK: (2) 3-5-001:064
EAST KUIKAHI DRIVE & WAIALE ROAD
WAILUKU, MAUI, HAWAII

PRELIMINARY LANDSCAPE PLAN

NO.	DATE	REVISION	BY

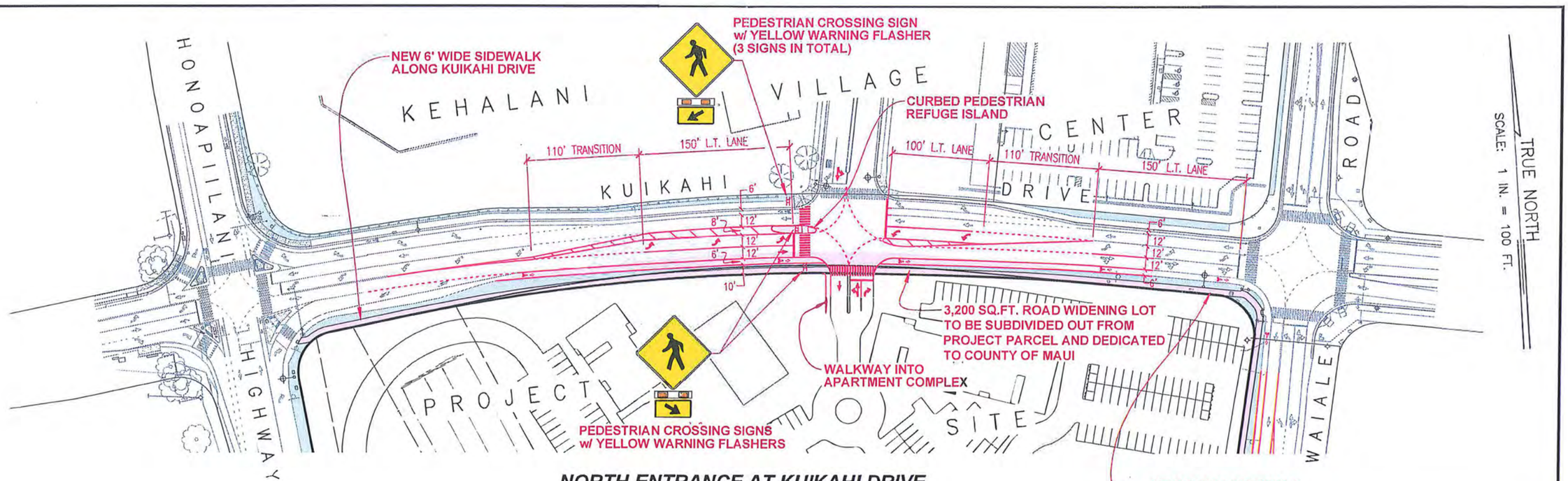
TITLE: PRELIMINARY LANDSCAPE PLAN

PROJECT NO: 17-06

DATE: JULY, 2017

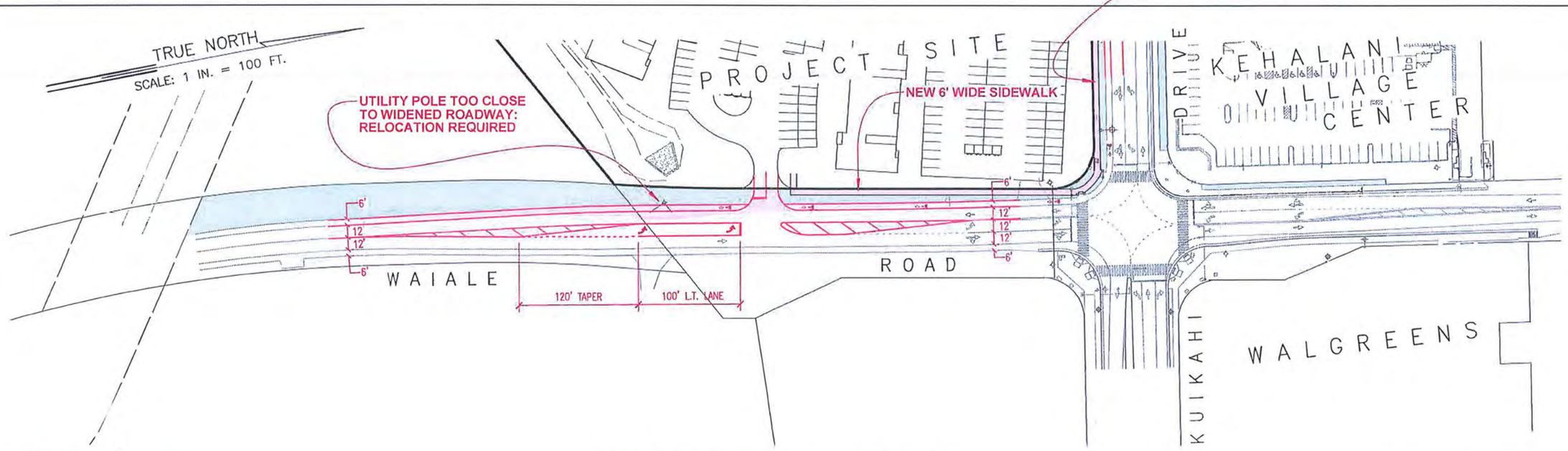
DRAWING NO: LP-1

SHEET OF



NORTH ENTRANCE AT KUIKAHI DRIVE

Scale: 1 inch = 100 feet



EAST ENTRANCE AT WAIALE ROAD

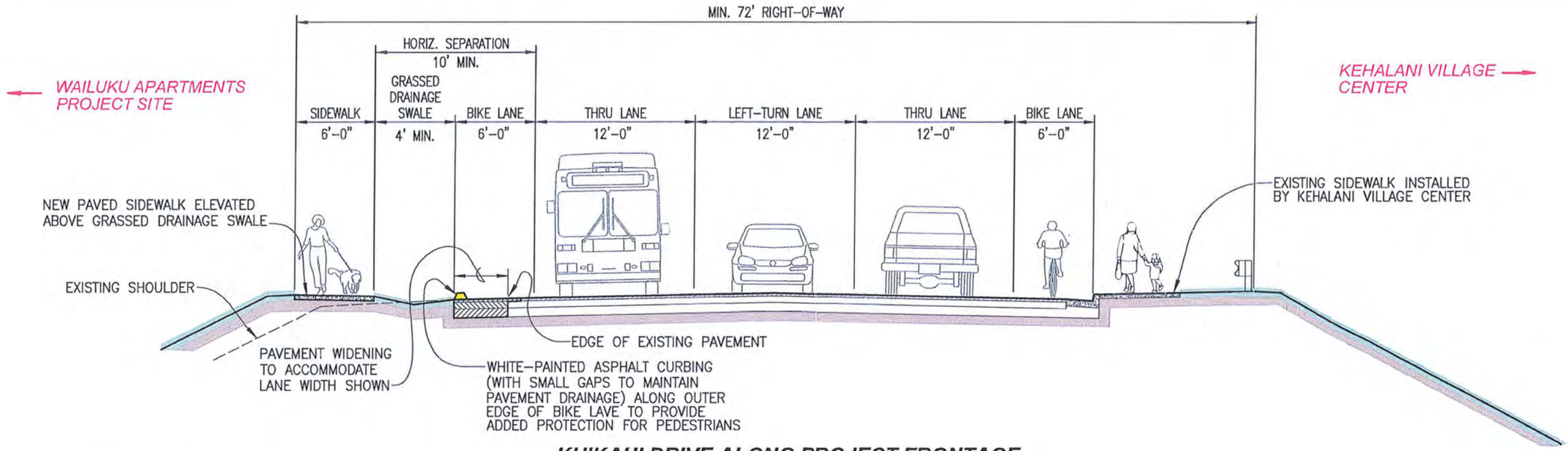
Scale: 1 inch = 100 feet

NOTE:
RED SHADING DENOTES
AREAS OF PAVEMENT WIDENING

Proposed Access Improvements

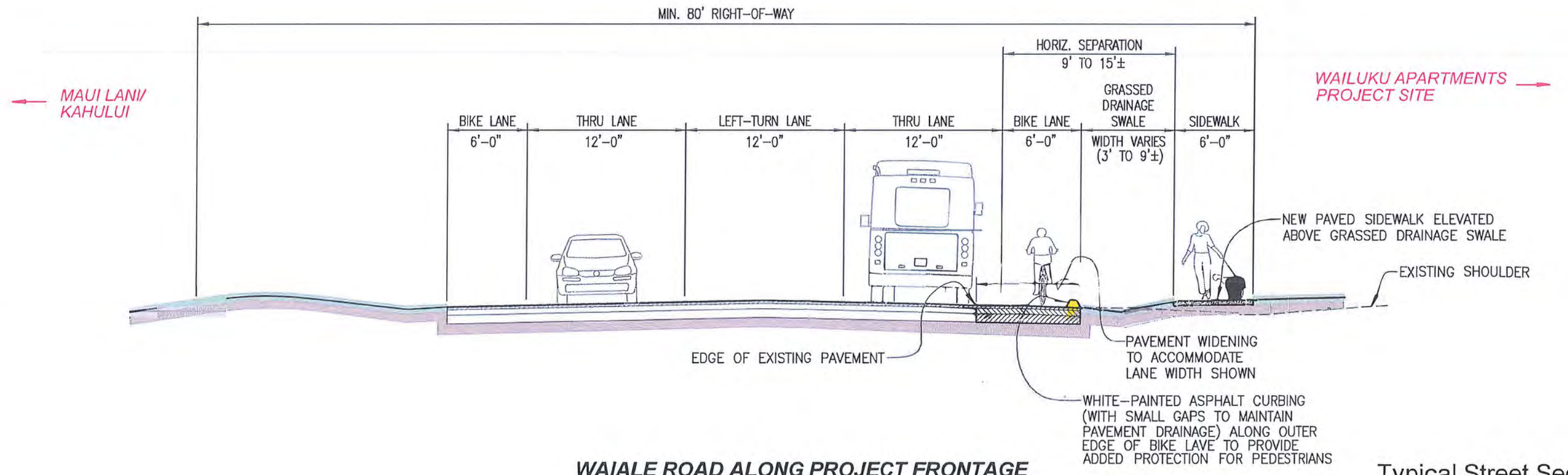
EXHIBIT "2A"

V:\Projdata\16proj\16052\dwg\exhibits\Engineering Report\Figure 2-1-Access Imp-00.dwg



KUIKAHI DRIVE ALONG PROJECT FRONTAGE

Scale: 1 inch = 8 feet



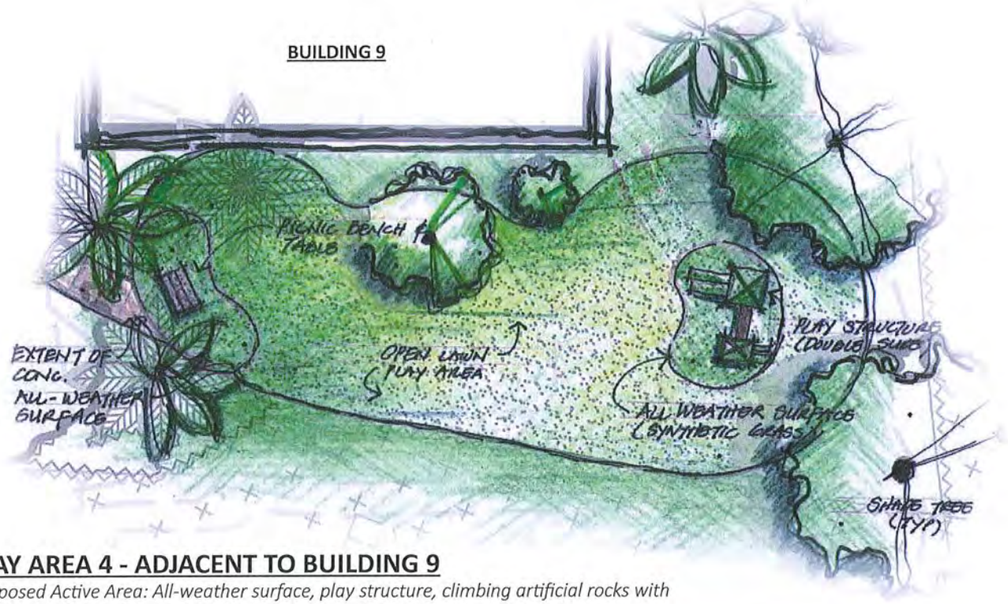
WAIALE ROAD ALONG PROJECT FRONTAGE

Scale: 1 inch = 8 feet

Typical Street Sections:
Kuikahi Dr. and Waiale Rd.

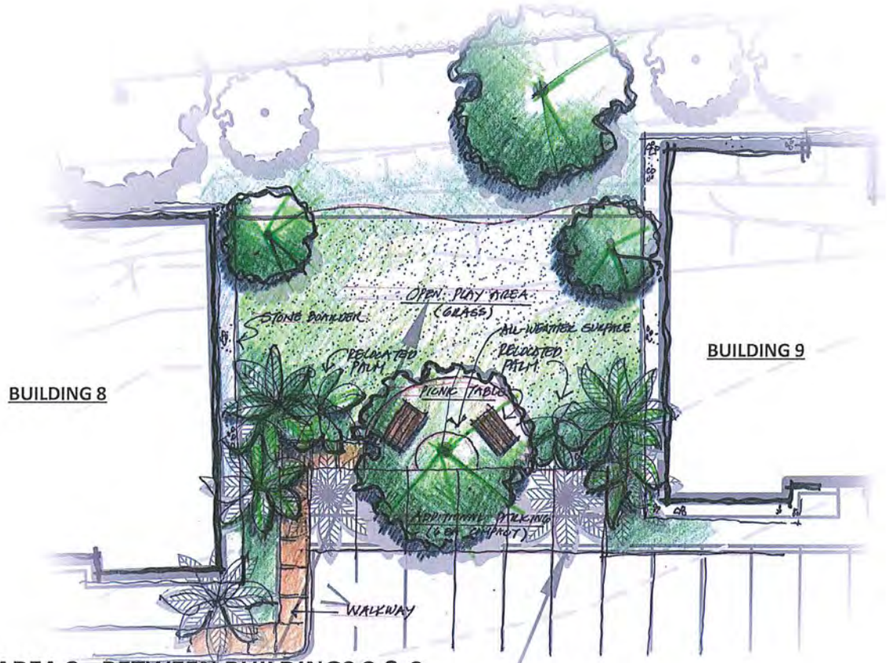
V:\Proldata\16proj\16052\dwg\exhibits\Engineering Report\Figure 2-2-typ sect-00.dwg

EXHIBIT "2B"



PLAY AREA 4 - ADJACENT TO BUILDING 9

(Proposed Active Area: All-weather surface, play structure, climbing artificial rocks with picnic table & bench in proposed open grassed play area.)



PLAY AREA 3 - BETWEEN BUILDINGS 8 & 9

(Proposed Passive Area: All-weather surface, picnic tables & bench in proposed open smaller grassed play area. Additional tandem parking provided.)



PLAY AREA 1&2 - ADJACENT TO COMMUNITY CENTER & POOL

(Proposed Active Area: PA 1: All-weather surface, play structure, climbing artificial rocks and benches in proposed open grassed play area. PA 2: All-weather surface, climbing rocks & cargo nets w/ 3ea putting holes.)



SCALE: NTS

LEGACY PARTNERS

PIER MANAGEMENT - HAWAII LLC
SCHATZ COLLABORATIVE LLC

OPEN LAWN PLAY AREA CONCEPTS

WAILUKU APARTMENTS

NOVEMBER 13, 2017

EXHIBIT "3"

CliffordPlanning Architecture

FINAL ENVIRONMENTAL ASSESSMENT

8

Final Environmental Assessment

WAILUKU APARTMENT RENTAL HOUSING PROJECT
(TMK 3-5-001:064)

Prepared for:

LEGACY WAILUKU LLC

Approving Agency:
Hawaii Housing Finance and Development Corporation

July 2018

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by Munekiyo Hiraga

MUNEKIYO HIRAGA

Planning. Project Management. Sustainable Solutions.

Final Environmental Assessment

WAILUKU APARTMENT RENTAL HOUSING PROJECT
(TMK 3-5-001:064)

Prepared for:

LEGACY WAILUKU LLC

Approving Agency:
Hawaii Housing Finance and Development Corporation

July 2018

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by Munekiyo Hiraga

MUNEKIYO HIRAGA

Preface

Legacy Wailuku LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, Hawai'i Revised Statutes (HRS). The project, known as the Wailuku Apartment Rental Housing Project, will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with approximately 661 parking stalls. The project will also include a community center/leasing office building, swimming pool, barbeque area, and four (4) children play areas.

In seeking project implementation through Section 201H-38, Legacy Wailuku LLC, has coordinated with the State of Hawai'i, Hawai'i Housing Finance and Development Corporation (HHFDC) to address compliance requirements for Chapter 343, Hawai'i Revised Statutes (HRS). In this regard, Legacy Wailuku LLC, through its original consultant, Bagoyo Development Consulting Group, prepared a Chapter 343, HRS, Environmental Assessment (EA) in 2017. With the HHFDC as the approving agency, the Draft EA for the Wailuku Apartment Rental Housing Project was filed with the State of Hawai'i, Office of Environmental Quality Control (OEQC). The original Draft EA prepared by Bagoyo Development Consulting Group was published in the September 23, 2017 edition of the OEQC's Environmental Notice.

In consultation with the HHFDC, Legacy Wailuku LLC determined that requirements of Chapter 343, HRS would be best addressed through a new EA process. Accordingly, the original 2017 Draft EA prepared by Bagoyo Development Consulting Group was withdrawn via notice published in the February 8, 2018 edition of the Environmental Notice.

It is noted that with the publication of the original Draft EA in September 23, 2017, comments were received from a number of interested parties during the 30-day comment period for the original Draft EA. Responses to those comment letters were prepared by Bagoyo Development Consulting Group and mailed to each commenting party.

Munekiyo Hiraga was retained by Legacy Wailuku LLC to prepare the new Chapter 343, HRS, EA. A new Draft EA, dated March 2018, was prepared and published in the April 8, 2018 edition of the Environmental Notice. Comments received on the original Draft EA prepared by Bagoyo Development Consulting Group and published on September 23, 2017 were included in the March 2018 Draft EA. In addition, the March 2018 Draft EA included early consultation comments received, as well as responses to those comments, during the preparation of the new Draft EA. This document represents the Final EA for the project and includes comments received, as well as responses, on the Draft EA published on April 8, 2018.

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List of Acronyms

AASHTO	American Association of State Highway and Transportation
ACE	Army Corp of Engineers
AFNSI	Anticipated Finding of No Significant Impact
AAR	Archaeological Assessment Report
ALISH	Agricultural Lands of Importance to the State of Hawai'i
AM	Morning
AMI	Area Median Income
AMP	Archaeological Monitoring Plan
AMSL	Above Mean Sea Level
ASH	Archaeological Surveys Hawaii
ASTM	American Society for Testing and Materials
BMP	Best Management Practice
CDOT	County of Maui, Department of Transportation
CFS	Cubic Feet per Second
CIA	Cultural Impact Assessment
COM	County of Maui
CPA	Community Plan Amendment
DBA	District Boundary Amendment
DBEDT	Department of Business, Economic Development and Tourism
DEM	Department of Environmental Management
DHHL	Department of Hawaiian Home Lands
DLNR	Department of Land and Natural Resources
DNL	Day-Night Average Noise Level
DOE	Department of Education
DOH	Department of Health
DPW	Department of Public Works
DWS	Department of Water Supply
EA	Environmental Assessment
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FACE	Faith Action Community Equity
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GPD	Gallons per Day
GPM	Gallons per Minute
HAR	Hawai'i Administrative Rules
HC&S	Hawaiian Commercial & Sugar Company
HCZMP	Hawaii Coastal Zone Management Program
HEER	Hazard Evaluation and Emergency Response
HHFDC	Hawaii Housing Finance and Development Corporation
HRS	Hawai'i Revised Statutes
HUD	U.S. Department of Housing and Urban Development
IaA	'Īao silty clay
IcB	'Īao clay
ISWMP	Integrated Solid Waste Management Plan
LOS	Level of Service
LSB	Land Study Bureau

MCC	Maui County Code
MIP	Maui Island Plan
MPD	Maui Police Department
MPH	Miles per Hour
MUTCD	Manual on Uniform Traffic Control Devices
NPDES	National Pollutant Discharge Elimination System
OEQC	Office of Environmental Quality Control
PER	Preliminary Engineering Report
PM	Afternoon
Psi	Pounds per square inch
SCS	Scientific Consultant Services, Inc.
SFP	State Functional Plan
SDOT	State Department of Transportation
SHPD	State Historic Preservation Division
SLUC	State Land Use Commission
sq. ft.	square feet
STIP	State Transportation Improvement Program
TIAR	Traffic Impact Analysis Report
UGB	Urban Growth Boundary
USFWS	U.S. Fish and Wildlife Service

Executive Summary

Project Name:	Wailuku Apartment Rental Housing Project
Type of Document:	Final Environmental Assessment
Legal Authority:	Chapter 343, Hawai'i Revised Statutes (HRS)
Determination:	Finding of No Significant Impact (FONSI)
Applicable Environmental Assessment review "Trigger":	Use of County Lands (Utility and Roadway Improvements)
Location:	Maui Island Wailuku TMK No. (2)3-5-001:064
Landowner:	Kehalani Agricultural Investors LLC c/o Dowling Company Inc 2005 Main Street Wailuku Hawai'i 96793
Applicant:	Legacy Wailuku LLC 1111 Third Avenue Seattle, Washington 98101 Contact: Linda Schatz Phone: (808) 428-8717
Approving Agency:	Hawai'i Housing Finance and Development Corporation 677 Queen Street Honolulu, Hawai'i 96813 Contact: Ken T. Takahashi Phone: (808) 587-0547
Consultant:	Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawai'i 96793 Contact: Michael Munekiyo, AICP Phone: (808) 244-2015
Project Summary:	Legacy Wailuku LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will

consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 661 parking stalls. The project will also include a community center/leasing office building, swimming pool, barbeque area, and four (4) children play areas.

The proposed project involves the use of County lands involving connections to the County's roadways, road widening improvements, and utilities involving work within the County rights-of-way for Kuʻikahi Drive and Waiʻale Road. The use of County lands is a trigger for the preparation of an Environmental Assessment (EA) pursuant to Chapter 343, Hawaiʻi Revised Statutes (HRS).

As such, this EA has been prepared to evaluate the technical characteristics, environmental impacts and alternatives, as well as to advance findings relative to the proposed project. The approving agency for the EA is the Hawaiʻi Housing Finance and Development Corporation.

PROJECT OVERVIEW

I. PROJECT OVERVIEW

A. PROJECT LOCATION, CURRENT LAND USE, AND OWNERSHIP

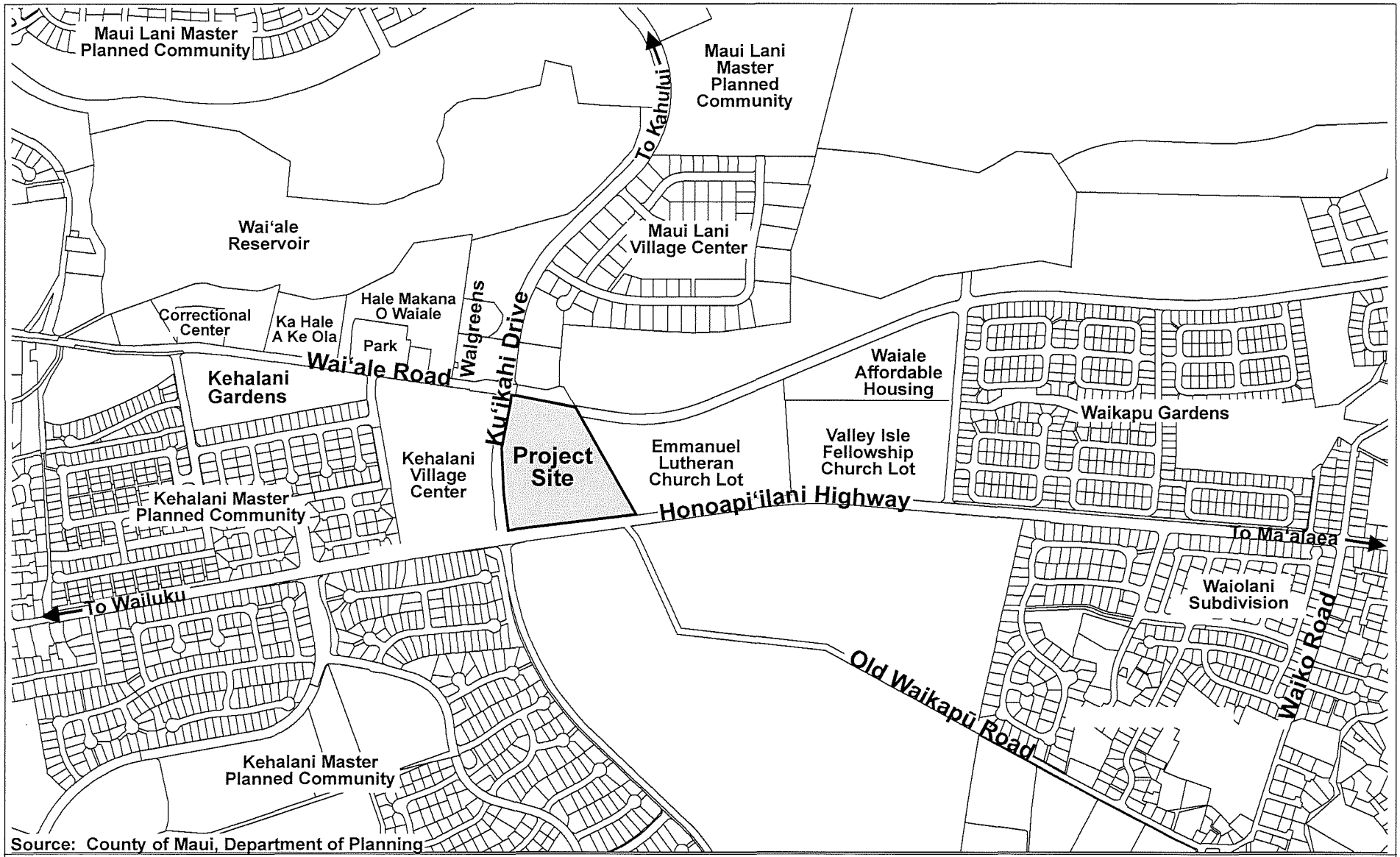
Legacy Wailuku LLC (herein referred to as "Applicant") is proposing the development of the Wailuku Apartment Rental Housing Project. The project site consists of approximately 14.416 acres of land, identified as Tax Map Key (2) 3-5-001:064, located in Wailuku, Maui, Hawai'i. The property is owned by Kehalani Agricultural Investors LLC. The subject parcel is bounded by Honoapi'ilani Highway to the west, Ku'ikahi Drive to the north, Wai'ale Road to the east and church lots to the south. See **Figure 1**.

The subject property is located adjacent to the Kehalani Master Planned Community and is directly south of the mixed use commercial/residential Kehalani Village Center containing Foodland, Coffee Bean and Tea Leaf, Long's Drug Store, McDonald's, and the Aloha Gas Station. The Maui Lani Master Planned Community's mixed use commercial/residential Maui Lani Village Center is located across the subject property and Wai'ale Road. Refer to **Figure 1**.

Along Wai'ale Road north of its intersection with Ku'ikahi Drive is Walgreens, the Kehalani Garden Apartments, Ka Hale A Ke Ola Homeless Resource Center, which provides emergency shelter and transitional housing, and the Maui Community Correctional Center.

Hale Makana O Waiale, a 196-unit affordable rental project, is also located along Wai'ale Road in this vicinity. South of the subject property is the 467-unit affordable housing subdivision known as Waikapu Gardens Subdivision Phases 1 and 2. Also, located south are the Emmanuel Lutheran Church lot and Valley Isle Fellowship Church lot. Refer to **Figure 1**. There are no structures on the Emmanuel Lutheran Church property. There is an existing worship facility on the Valley Isle Fellowship lot. A timetable for the future development of these lots has not been defined.

Across Honoapi'ilani Highway, to the west of the property are vacant agricultural lands. This area was previously identified as the site for the Pu'unani Subdivision, consisting of 147 residential lots and 450 multi-family units. The Pu'unani Subdivision project was withdrawn for consideration by the State Land Use Commission on January 30, 2017. There is currently no proposal for development for this property.



Source: County of Maui, Department of Planning

Figure 1

Wailuku Apartment Rental Housing Project
Location Map

0 250 500 1,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Location Map (REV)

A portion of the site is currently vacant while a small portion of the property near the northeast contains temporary office trailers and landscape staging area utilized by the Kehalani Community Association through a right-of-entry agreement. See **Figure 2**. Once the project is ready to initiate construction, the temporary trailers will be removed. The Kehalani Community Association is aware of the project and the need to vacate the property prior to construction. A natural drainageway crosses the property along its southern boundary and a man-made drainageway traverses the western half of the property that eventually empties into a retention basin in Waikapū across Waiʻale Road and Waikapu Gardens Subdivision.

B. BACKGROUND

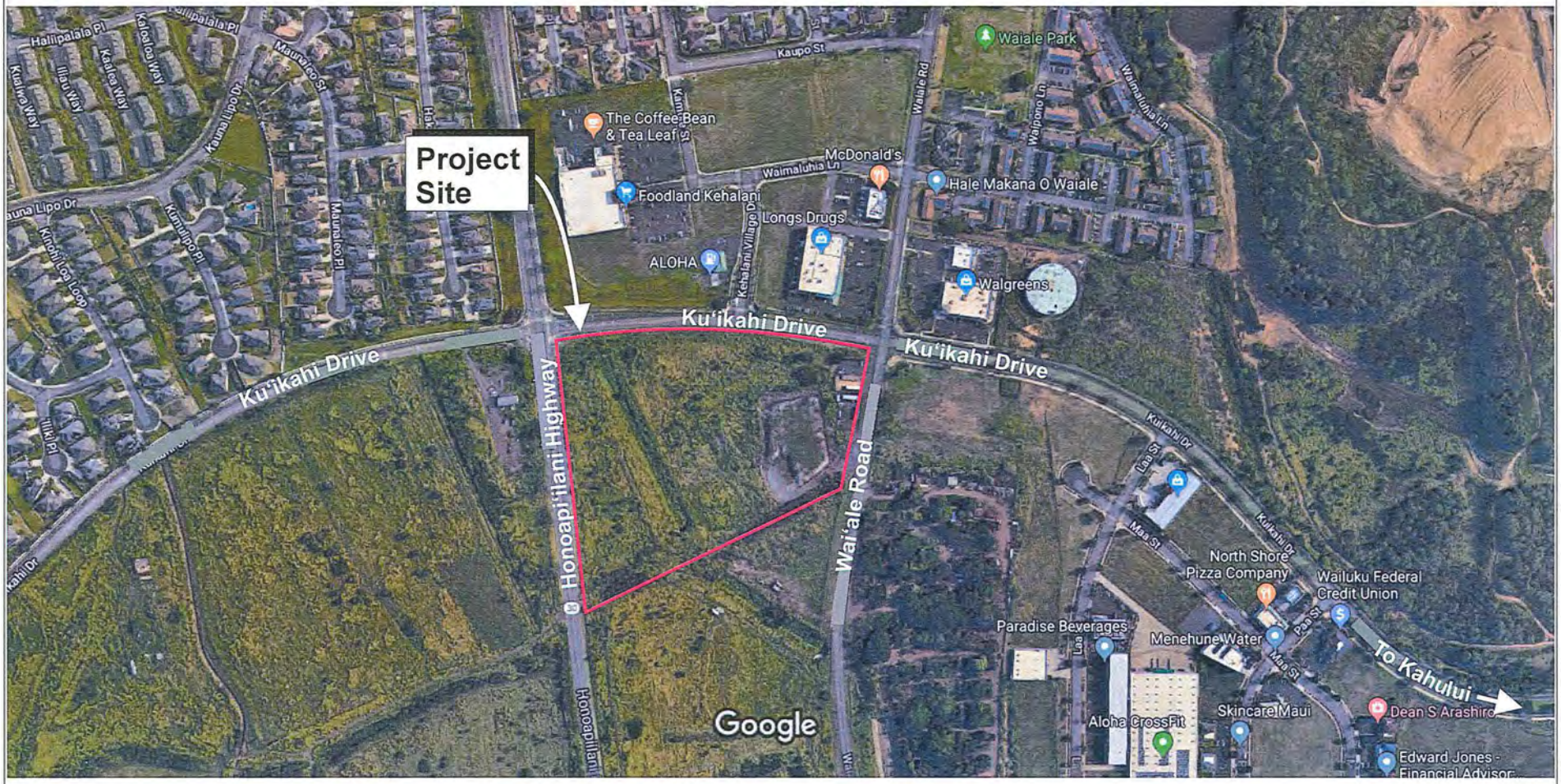
The subject property was formerly in sugar cane production. The property is in the State "Agricultural" district and zoned by the County of Maui as "Agricultural" district. The Maui Island Plan includes the subject property in the Urban Growth Boundary (UGB) while the parcel is identified as Future Growth Reserve by the Wailuku-Kahului Community Plan.

C. PROPOSED ACTION

The Applicant is seeking approval of the Wailuku Apartment Rental Housing Project pursuant to Section 201H-38, Hawaiʻi Revised Statutes (HRS) from the State of Hawaiʻi Housing Finance and Development Corporation (HHFDC). The Wailuku Apartment Rental Housing Project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with approximately 661 parking stalls. The project will also include a community center/leasing office building, swimming pool, barbeque area, and four (4) children play areas. Access to the property is proposed through a new access driveway along Waiʻale Road and a new access drive via a cross intersection with the Kuʻikahi Drive entry to the Kehalani Village Center. See **Figure 3**, **Figure 4**, and **Figure 5**. See **Appendix "A"**. Upon receipt of the Section 201H-38, HRS approval the applicant will seek a State District Boundary Amendment to reclassify the property from the "Agricultural" district to the "Urban" district.

The proposed development will consist of 60 percent affordable apartment units which will be priced to qualified individuals earning within the 80 percent to 140 percent of Maui's area median income (AMI) as set forth by the HHFDC's affordable rental guidelines.

Distribution of units by product type and floor area is presented in **Table 1**.



Source: Google, Map data

Figure 2

Wailuku Apartment Rental Housing Project
Aerial Map of TMK (2)3-5-001:064

0 50 100 200 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Aerial Map



Source: Russel Y. Gushi Landscape Architect

Figure 3

Wailuku Apartment Rental Housing Project
Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(FEA)



Building Type I - Elevation



Building Type II - Elevation

Source: Clifford Planning & Architecture

Figure 4

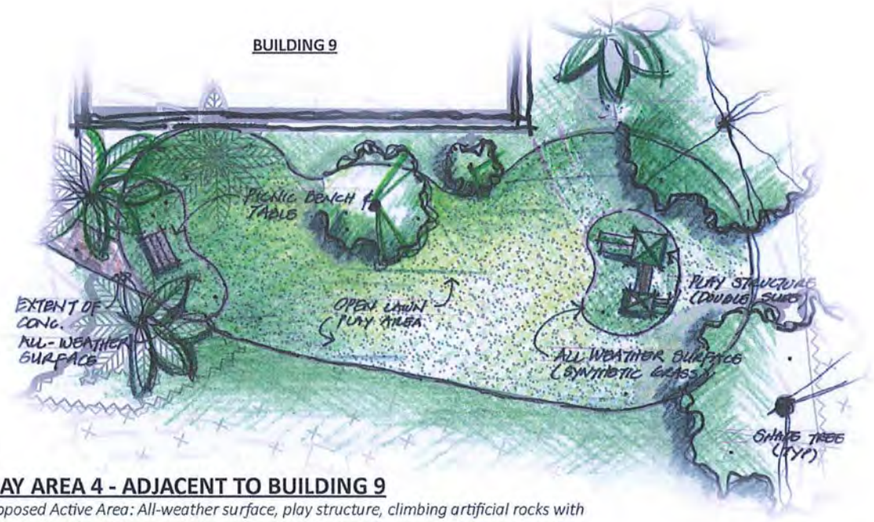
Wailuku Apartment Rental Housing Project

Conceptual Building Elevations

NOT TO SCALE

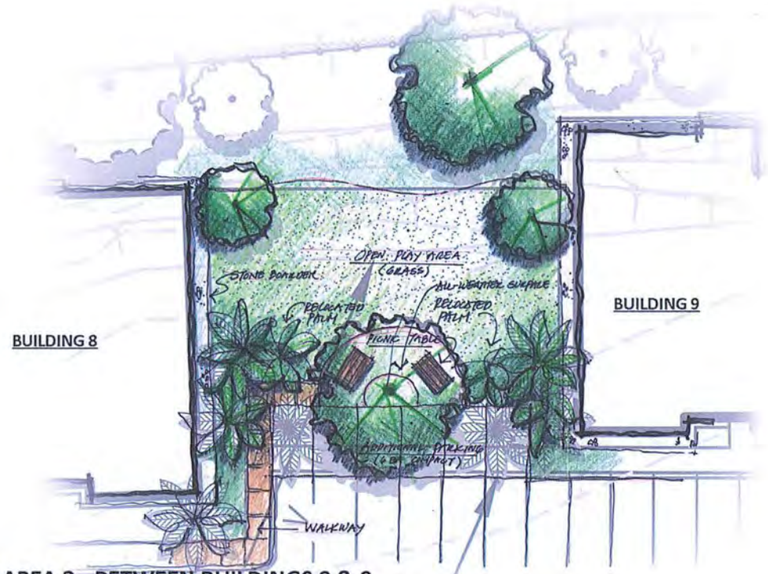
Prepared for: Legacy Wailuku LLC

MUNEKIYO HIRAGA



PLAY AREA 4 - ADJACENT TO BUILDING 9

(Proposed Active Area: All-weather surface, play structure, climbing artificial rocks with picnic table & bench in proposed open grassed play area.)



PLAY AREA 3 - BETWEEN BUILDINGS 8 & 9

(Proposed Passive Area: All-weather surface, picnic tables & bench in proposed open smaller grassed play area. Additional tandem parking provided.)



PLAY AREA 1&2 - ADJACENT TO COMMUNITY CENTER & POOL

(Proposed Active Area: PA 1: All-weather surface, play structure, climbing artificial rocks and benches in proposed open grassed play area. PA 2: All-weather surface, climbing rocks & cargo nets w/ 3ea putting holes.)



Source: Clifford Planning & Architecture

Figure 5

Wailuku Apartment Rental Housing Project

Conceptual Play Areas

NOT TO SCALE

Prepared for: Legacy Wailuku LLC

MUNEKIYO HIRAGA

Table 1. Distribution of Product Type and Floor Area

Unit Type	Number of Units	Floor Area
Studio	27	424 sq. ft.
1 Bedroom/1 Bath	108	552 sq. ft.
2 Bedroom/2 Bath	135	741 to 812 sq. ft.
3 Bedroom/2 Bath	54	934 to 956 sq. ft.
TOTAL NUMBER OF UNITS	**324**	

The distribution of units by income category is following the guidelines established by the HHFDC for the County of Maui. Using HHFDC's Maui affordable rent guidelines, 55 of the units will be affordable within the 51-80% AMI category, 55 units will fall within the 81-100% AMI category, and 55 units will fall within the 101-120% AMI income category, and 30 units will fall within the 121-140% AMI income category for a combined affordable unit total of 195 rentals. See **Table 2**.

Table 2. HHFDC Maui Affordable Rental Guidelines, Distribution of Units by Income Category and Rental Ranges

Area Median Income Level	Income Group	Number of Units	Rental Range*	Percentage of Units
51–80%	Low income	55	$627 - $1,616*	17%
81-100%	Low-moderate income	55	$1,123 - $2,107*	17%
101-120%	Low-moderate income	55	$1,453 - $2,598*	17%
121-140%	Moderate income	30	$1,783 - $3,089*	9%
Subtotal of Affordable Units		**195**		60%
N/A	Market	129	---	40%
Grand Total		**324**		**100%**

* Note: Rents are based on 2018 HHFDC Rent Guidelines minus utility allowance. These are subject to change based on annually published rent guidelines and utility allowances by State and County agencies.

D. PROJECT NEED

According to the Central Maui Rental Market Study (January 22, 2017) prepared by Paul Cassiday, there is a strong demand for workforce apartment rentals in Central Maui, especially households earning 80 percent to 140 percent of the AMI. Maui's housing prices continue to trend upward, putting pressure on housing rental rates. The proposed Wailuku Apartment Rental Housing Project will help meet the demand for workforce rental units on the island of Maui.

In addition to increasing housing prices, Maui's visitor industry continues to expand. There have been record breaking numbers of visitors and increased spending which also creates additional jobs. As the Maui economy increases the number of jobs, housing pressure also increases and, therefore, rental rates rise to unaffordable levels.

E. REGULATORY CONTEXT

1. Section 201H-38, Hawai'i Revised Statutes

The Applicant has formulated the proposed project to meet the criteria for a Section 201H-38, HRS project. Section 201H-38, HRS promotes the delivery of affordable housing by allowing the exemption of a project from

> *...all statutes, ordinances, charter provisions, and rules of any governmental agency relating to planning, zoning, construction standards for subdivisions, development and improvement of land and the construction of units thereon.*

As such, a Section 201H-38, HRS application is being filed with HHFDC to request exemptions from the District Boundary Amendment, Community Plan Amendment, and Change of Zoning processes, as well as other County requirements in order to support the timely implementation of the project, without compromising public health, safety, or welfare considerations. Following publication of the Draft EA and subsequent to meeting with County agencies, it is noted that there has been a reduction in the number of exemptions sought from the County. The list of applicable exemptions moving forward is contained in Chapter IV and **Appendix "I"** of this EA document.

At least 60 percent of the proposed units will meet the affordable rental criteria of HHFDC. Rentals for the affordable units will be affordable to those earning incomes between 80 percent and 140 percent of the AMI for Maui island.

2. State District Boundary

The proposed project will require a State District Boundary Amendment (DBA) from the State Agricultural District to the State Urban District. The property is less than 15 acres and the DBA will be processed through the Maui County Council. The Section 201H-38, HRS application will include an exemption from Chapter 19.68, State Land Use District Boundaries and Chapter 19.510, Application and Procedures, Maui County Code (MCC), as well as Chapter 8, Department of Planning, County of Maui Charter to allow the DBA request to be filed directly with the Council. The project site is not designated Important Agricultural Lands.

3. Community Plan and Zoning

The subject property is identified as "Future Growth Reserve" on the Wailuku-Kahului Community Plan. Pursuant to Section 201H-38, HRS, the applicant will file an application with HHFDC to seek an exemption from Chapter 2.80B, General Plan and Community Plans, MCC, to waive the requirement for a community plan amendment from "Future Growth Reserve" to "Apartment". The property is also zoned "Agricultural" district. The Section 201H-38, HRS application will also request an exemption from Chapter 19, Comprehensive Zoning, MCC, to waive the requirement for a change of zoning from the "Agricultural" district to the "A-2, Apartment" district.

F. CHAPTER 343, HAWAI'I REVISED STATUTES, REGULATORY CONTEXT

The proposed project involves the use of County lands involving connections to the County's roadways, road widening improvements, and utilities involving work within the County right-of-ways for Ku'ikahi Drive and Wai'ale Road. The use of County lands is a trigger for Chapter 343, HRS. As such, an Environmental Assessment (EA) has been prepared pursuant to Chapter 343, HRS, and Chapter 200 of Title 11, Hawai'i Administrative Rules (HAR), Environmental Impact Statement Rules. Acccordingly, this document addresses the project's technical characteristics and environmental impacts and alternatives and advances findings and conclusions relative to the significance of the project.

It is noted that an exemption from Chapter 2.80B, General Plan and Community Plans, will be requested as part of the Applicant's 201H application. As such, a Community Plan Amendment application will not be required.

Final design and construction of the proposed improvements will be initiated upon approval of the Section 201H-38, HRS and construction permits.

G. PROJECT COST AND IMPLEMENTATION SCHEDULE

The proposed action has an estimated project valuation of $70 million which includes planning, design, and construction. Construction is preliminarily scheduled to begin in the 4th quarter of 2019. Total construction duration is estimated to be 20 months. The project is anticipated to be completed by 2021.

DESCRIPTION OF THE EXISTING CONDITIONS, POTENTIAL IMPACTS, AND PROPOSED MITIGATION MEASURES

II

II. DESCRIPTION OF THE EXISTING CONDITIONS, POTENTIAL IMPACTS, AND PROPOSED MITIGATION MEASURES

A. PHYSICAL SETTING

1. Surrounding Land Use

a. Existing Conditions

The subject property is located adjacent to the Kehalani Master Planned Community and is directly south of the mixed-use commercial/residential Kehalani Village Center containing Foodland, Coffee Bean and Tea Leaf, Long's Drug Store, McDonald's, and the Aloha Gas Station. The Maui Lani Master Planned Community's mixed-use commercial/residential Maui Lani Village Center is located across the subject property and Wai'ale Road. Refer to **Figure 1**.

Along Wai'ale Road, north of its intersection with Ku'ikahi Drive, is Walgreens, the Kehalani Garden Apartments, Ka Hale A Ke Ola Homeless Resource Center, and the Maui Community Correctional Center. Hale Makana O Waiale, a 196-unit affordable rental project, is located north of and adjacent to Ka Hale A Ke Ola. South of the subject property is the 467-unit affordable housing subdivision known as Waikapu Gardens Subdivision Phases 1 and 2. Also, located south of the proposed project is the recently approved 70-unit Wai'ale Affordable Housing project north of Waikapu Gardens, the Emmanuel Lutheran Church lot, and Valley Isle Fellowship Church lot. Refer to **Figure 1**.

b. Potential Impacts and Mitigation Measures

The project site is located within the Urban Growth Boundary (UGB) of the Maui Island Plan (MIP) and is identified as "Future Growth Area" on the Wailuku-Kahului Community Plan. As such, development of the proposed project adjacent to existing infrastructure is in an appropriate location adjacent to the urbanized area of Wailuku Town. The proposed project will not exceed 45 ft. in height from finished grade and is compatible with the adjacent Kehalani Village Center, which allows multi-family units and has a maximum height of four (4) stories and 45 feet, and the Maui Lani Village Center which allows multi-family development with a maximum height of three (3) stories and 45 feet. The "P-1, Public/Quasi-Public" church lots south of the project site have a maximum height limit of 40 feet. The area

makai (east) of Honoapiʻilani Highway, including the project site, is located in the UGB until Waikapū Stream south of the urbanized area of Waikapū Town.

In the context of existing and future land use, the proposed project is not anticipated to have an adverse effect on the surrounding urban landscape.

2. Climate

a. Existing Conditions

Maui's climate is relatively consistent throughout the year. The island's climate varies as the terrain changes. Characteristic of Maui's climate, the proposed project site experiences mild and uniform temperatures year-round, moderate humidity and consistent northeasterly trade winds.

Average temperatures at the project site (based on temperatures recorded at Kahului Airport) range from the low 60s to high 80s (Fahrenheit). August is historically the warmest month, while January and February are the coolest. Annual precipitation rainfall average is 20 to 30 inches per year (Maui County Date Book, 2015). Winds blow predominantly out of the north-northeasterly direction.

b. Potential Impacts and Mitigation Measures

From an environmental standpoint, the replacement of vegetation with hardscape (buildings and pavement) may yield slightly increased ambient air temperature. The proposed landscape planting in the project site is anticipated to help reduce the so called "heat island effect" by absorbing heat throughout the project. The proposed project is not anticipated to have an adverse effect on climate.

3. Topography and Soil Conditions

a. Existing Conditions

Elevations across the project site range from approximately 360 feet at its southwest corner adjacent to Honoapiʻilani Highway, to roughly 306 feet at its northeast corner at the intersection of Kuʻikahi Drive and Waiʻale Road. The existing terrain slopes steadily downward from southwest to northeast across the project site and has an average slope of approximately 5 percent. An existing natural drainageway on the property follows the southern property boundary from a culvert under Honoapiʻilani Highway to a culvert under Waiʻale Road. A man-made drainage channel traverses

the property in a north to south direction. This channel is designed to convey stormwater runoff to a retention basin on the makai (east) side of Wai'ale Road across Waikapu Gardens.

Underlying the project site and surrounding area are soils belonging to the Pulehu-Ewa-Jaucus association. According to the Soil Survey of Islands of Kauaī, O'ahu, Maui, Moloka'i, and Lāna'i, State of Hawai'i, prepared by the United States Department of Agriculture Soil Conservation Service, these soils are characterized as having a slight to moderate erosion hazard (Foote et al, 1972). See **Figure 6**.

The project area is located on soils identified as 'Īao clay (IcB) and 'Īao silty clay (IaA) as the predominant soil types found on the project site. See **Figure 7**.

b. Potential Impacts and Mitigation Measures

The project site will be graded to maintain the natural forms of the existing terrain and drainage patterns. Best management practices (BMPs) will be implemented during construction to minimize impacts from soil erosion resulting from wind and water (e.g., dust and silt fencing, watering for dust control, etc.). The underlying soils do not pose limitations with respect to project constructability. The proposed project is not anticipated to have an adverse effect on topography and soils.

4. Agricultural Productivity Considerations

a. Existing Conditions

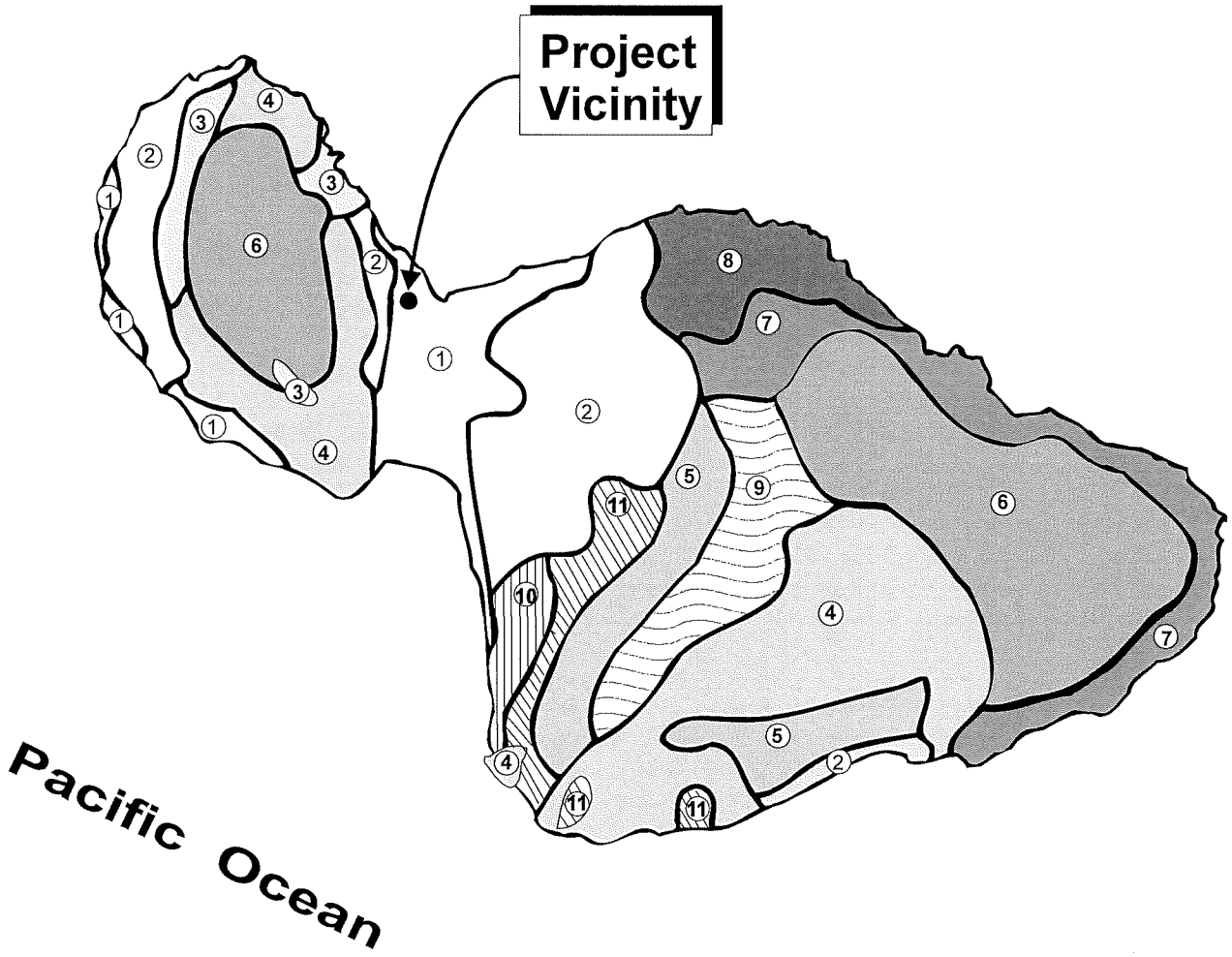
On the island of Maui approximately 235,770 acres have been designated as "Agricultural" by the State Land Use Commission (SLUC) representing just over 50 percent of the island.

In 1977 the State Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawai'i (ALISH). The classification system is based primarily, but not exclusively, on the soil classification of the land. The three (3) categories are "Prime", "Unique" and "Other Important" agricultural lands, with all remaining lands identified as "Unclassified".

"Prime" agricultural lands have soil quality, growing season, and moisture supply needed to produce sustained high yield crops economically. "Unique" agricultural lands possess a combination of soil quality, growing season, and moisture supply to produce sustained high yields of specific

LEGEND

- ① Pulehu-Ewa-Jaucas association
- ② Waiakoa-Keahua-Molokai association
- ③ Honolua-Olelo association
- ④ Rock land-Rough mountainous land association
- ⑤ Puu Pa-Kula-Pane association
- ⑥ Hydrandepts-Tropaquods association
- ⑦ Hana-Makaalae-Kailua association
- ⑧ Pauwela-Haiku association
- ⑨ Laumaia-Kaipoipoi-Olinda association
- ⑩ Keawakapu-Makena association
- ⑪ Kamaole-Oanapuka association



Map Source: USDA Soil Conservation Service

Figure 6

Wailuku Apartment Rental Housing Project

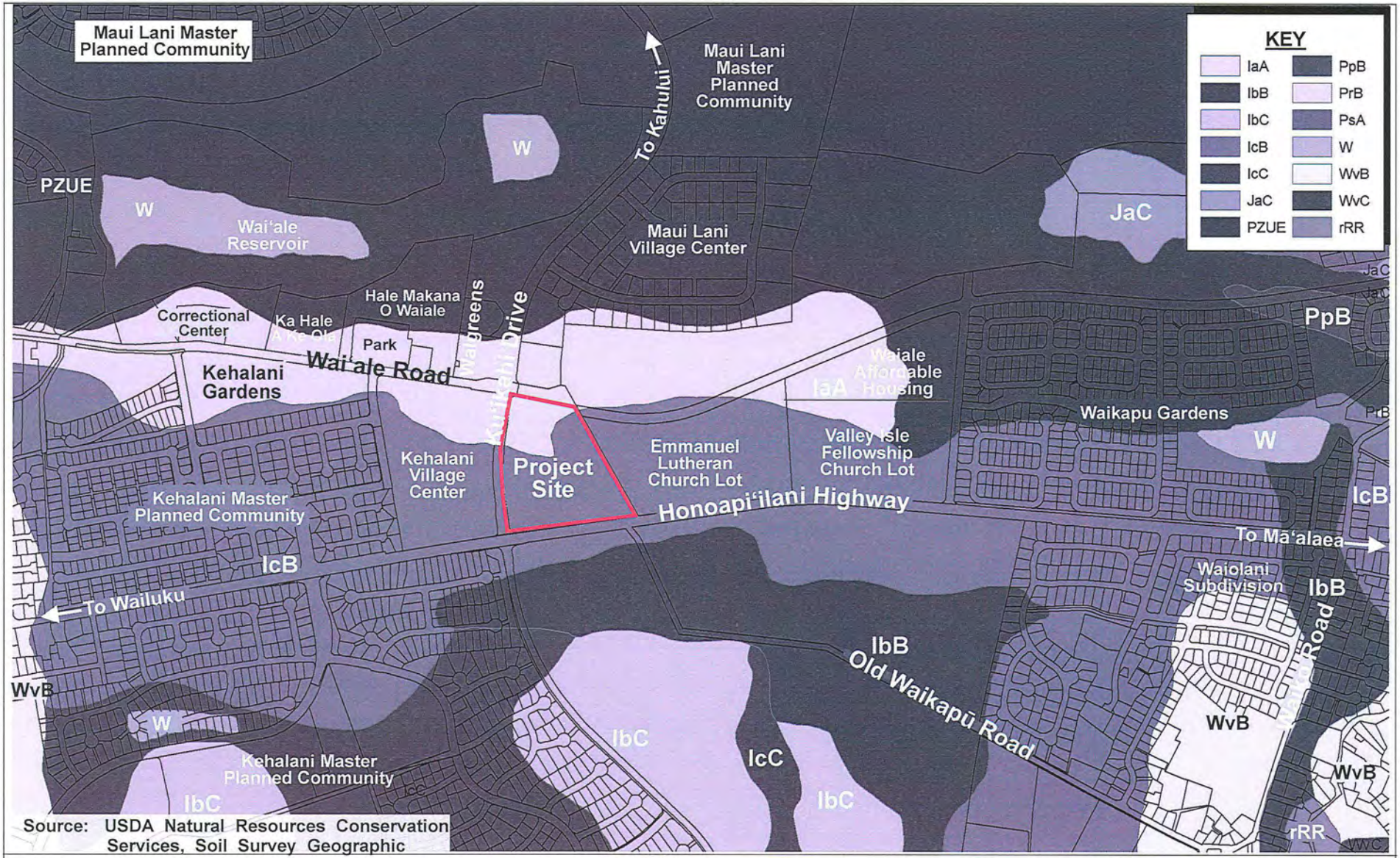
Soil Association Map

NOT TO SCALE

Prepared for: Legacy Wailuku LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Soil Association Map



Source: USDA Natural Resources Conservation Services, Soil Survey Geographic

Figure 7

Wailuku Apartment Rental Housing Project

Soil Classification Map

0 500 250 1,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Soil Classification

crop. "Other" important agricultural lands are lands that have not been rated "Prime" or "Unique" agricultural lands that are also of statewide or local importance for agricultural use.

Approximately 62,000 acres of the 235,770 acres of lands designated as "Agricultural" by the SLUC are identified as "Prime" agricultural lands. The subject property falls within the "Prime" agricultural land category. See **Figure 8**. The property was used for sugar cane cultivation, which ceased operation in the early 1980s. It has remained vacant, undeveloped and is not presently used in any agricultural cultivation.

Separately, the University of Hawai'i, Land Study Bureau (LSB) developed the Overall Productivity Rating, which classified soils according to five (5) productivity levels, with "A" representing the class of highest productivity soils and "E" representing the lowest. On the island of Maui "A" and "B" designated lands comprise approximately 21 percent of the SLUC designated "Agricultural" lands. The lands underlying the project site are designated "A". See **Figure 9**.

b. Potential Impacts and Mitigation Measures

The proposed project will utilize the property for needed rental housing for Maui's residents. The utilization of approximately 14 acres of "Agricultural" designated lands represents a small portion of the total lands (approximately 235,770 acres) designated by the SLUC as "Agricultural". The subject property has not been cultivated since the 1980s and is a remnant agricultural parcel separated from other agricultural lands by Honoapi'ilani Highway. The project is considered an infill development, as the property is located adjacent to existing urbanized areas including the Kehalani Master Planned Community and the Maui Lani Master Planned Community's mixed-use commercial/residential Maui Lani Village Center. The site is also located within the Urban Growth Boundary of the County's Maui Island Plan (MIP) which provides direction for future growth on the island and identifies areas deemed appropriate for future urbanization.

The demise of Hawaiian Commercial & Sugar Company (HC&S) at the end of 2016 opened approximately 29,000 acres formerly in sugar cane cultivation to other agricultural uses. The removal of approximately 14 acres of vacant agricultural land for the use of the provision of housing is not anticipated to have an adverse effect on agricultural productivity.

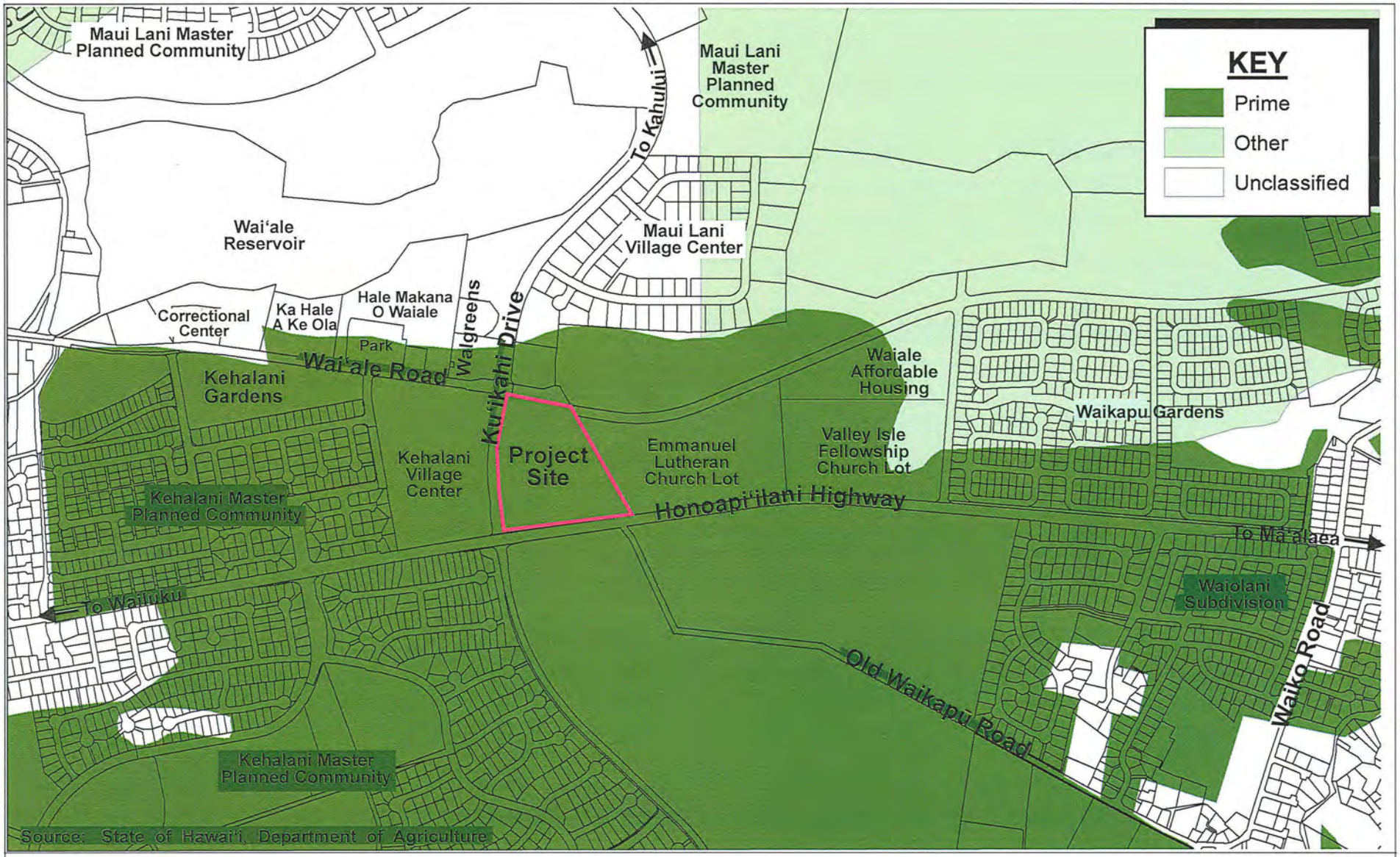


Figure 8

Wailuku Apartment Rental Housing Project

Agricultural Lands of Importance to the State of Hawai'i Map

0 500 Feet
250 1,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku LLC

Legacy\Wailuku Afford Rental\Applications\Figures\ALISH



Source: University of Hawai'i, Land Study Bureau

Figure 9

Wailuku Apartment Rental Housing Project

Land Study Bureau Map

0 500 250 1,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Land Study Bureau

5. Flood and Tsunami

a. Existing Conditions

The Flood Insurance Rate Map (FIRM), prepared by the United States Federal Emergency Management Agency (FEMA), Panel 1500030391E indicates the project site is situated in Flood Zone X (unshaded), outside both the floodplain and tsunami zone. See **Figure 10**. Flood Zone X (unshaded) represents areas outside of the 0.2 percent annual chance flood plain.

According to the Preliminary Engineering Report (PER) (March 9, 2018), a site specific drainage review of the property indicated the existing natural drainageway and the man-made drainage channel crossing the project site is within potential 100-year stormflow limits. See **Appendix "B"**.

b. Potential Impacts and Mitigation Measures

Based on the PER report, the project site is located in potential 100-year stormflow limits and outside of the tsunami inundation zone. Potential flooding from the natural drainageway will be mitigated either by (1) improving the drainageway to increase its capacity or (2) constructing an earthen levee or concrete flood barrier. As such, adverse impacts associated with floods and tsunamis are not anticipated.

6. Streams, Drainageways, Wetlands, and Reservoirs

a. Existing Conditions

The stream nearest to the project site is Waikapū Stream located approximately 1.5 miles to the south. Waikapū Stream is a perennial stream which originates in the upper reaches of Waikapū Valley, ultimately discharging into Keālia Pond, in the Ma'alaea flats. According to the Hawai'i Stream Assessment, the Waikapū Stream has no listed tributaries and flows to the sea year-round. The assessment also found that the Waikapū Stream was important for taro cultivation in the past and that Waikapū Valley may contain valuable cultural and historical sites. See **Figure 11**.

There is a plantation reservoir located west or mauka of the project site and Honoapi'ilani Highway and below the existing Wailuku Heights residential subdivision. This reservoir was formerly used for sugar cane irrigation, and is currently owned and maintained by Wailuku Water Company.



Source: Federal Emergency Managmenent Agency, FIRM 1500030391E

Figure 10

Wailuku Apartment Rental Housing Project

Flood Insurance Rate Map

250 Feet
0 125 500

Prepared for: Legacy Wailuku LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Flood Insurance Rate Map

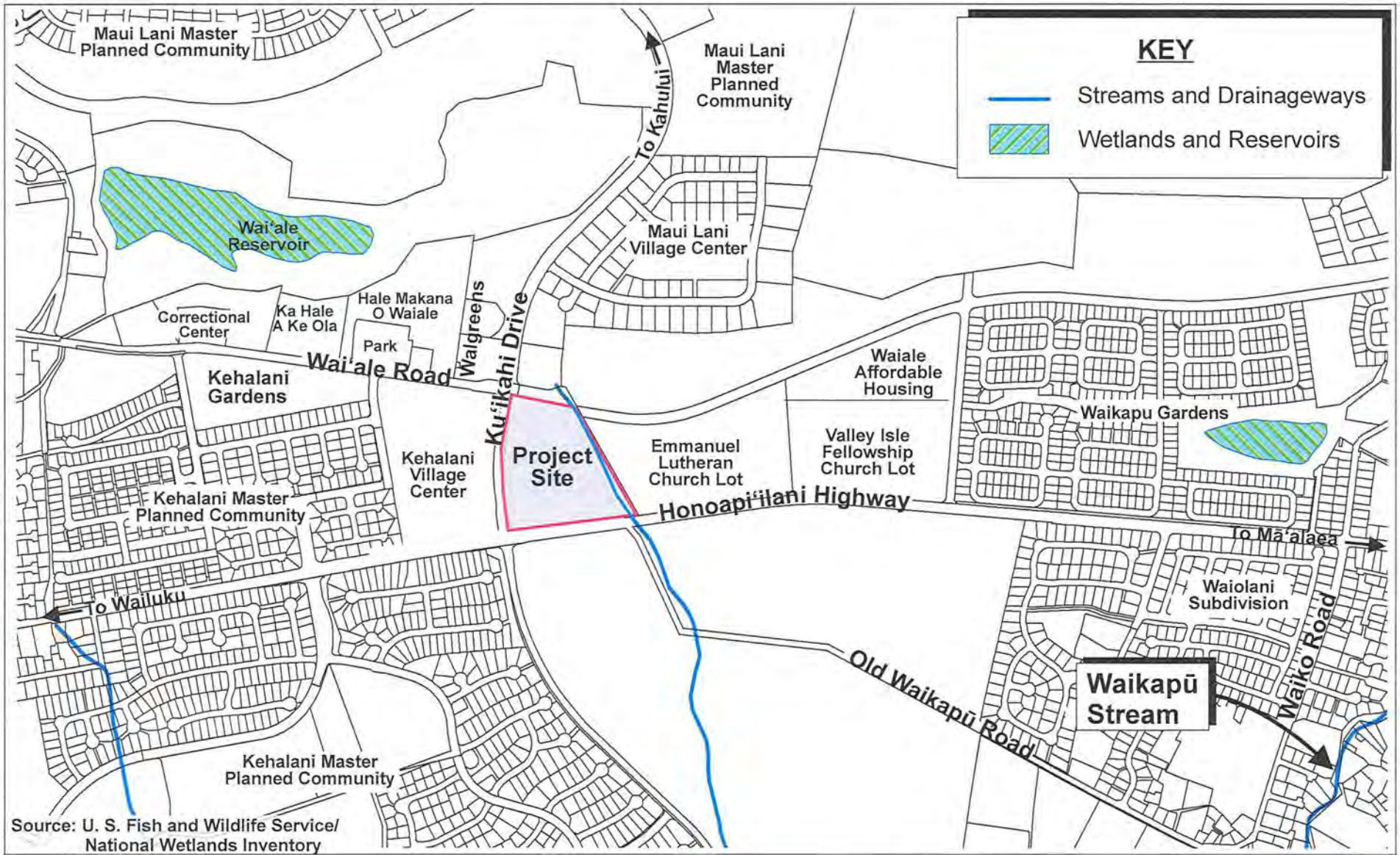


Figure 11

Wailuku Apartment Rental Housing Project

Streams, Drainageways, and Wetlands Map

0 250 500 1,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Streams Drainageways and Wetlands

On the project site along the southern boundary is a natural drainageway that originates in the West Maui Mountains then crosses under Honoapi'ilani Highway through a culvert crossing. The drainageway continues along the southern property boundary and exits through another culvert under Wai'ale Road and eventually empties into a dry overflow basin in the Wai'ale Reservoir.

According to the U.S. Fish and Wildlife Service there are no wetlands on or in the vicinity of the project site.

b. Potential Impacts and Mitigation Measures

The proposed drainage plan for the project will construct a system of drainlines and grassed swales to collect runoff from the project site and will connect to the existing drainage infrastructure in Wai'ale Road. The existing natural drainageway and manmade drainageway will remain on the property but will not be used to handle the increased runoff from the project site.

7. Flora and Fauna

a. Existing Conditions

A flora and fauna survey was conducted at the property by Robert W. Hobdy Environmental Consultant on February 2017. See **Appendix "C"**. According to the flora and fauna field survey, the vegetation across the proposed project area is dominated by two (2) non-native species, guinea grass *(Megathyrsus maximus)* and glycine *(Neontonia wightii)*. These two (2) species form a tall dense grassland that is smothered by vines. Also common are koa haole *(Leucaena leucocephala)* and castor bean *(Ricinus communis)*.

Of the 63 plant species encountered, four (4) were common native plants, 'uhaloa *(Walteria indica)*, kou *(Cordia subcordata)*, *(Ceperus polystachyos)* (*no common name*), and koali kua hula *(Merremia aegyptya)*, which are widespread in Hawai'i as well as other tropical countries. The vegetation throughout the project area is dominated by non-native species.

There are no listed Endangered or Threatened plant species, nor any plants that are candidates for such status that occur on the project site. No endangered or threatened plant habitats occur on or near the project and there are no wetlands that occur in this dry upland site.

With respect to fauna, two (2) non-native mammals, the mongoose *(Herpestes auropunctatus)* and axis deer *(Axis axis)* were observed during two (2) site visits. Other non-native mammals are likely to occur in the area, cat *(Felis catus)*, domestic dog *(Canis familiaris)*, rats *(Rattus spp.)* and mice *(Mus domesticus)*.

A special effort was made to look for the native Hawaiian hoary bat. No evidence of the Hawaiian hoary bat was observed.

Birdlife was somewhat sparse within the project area due to the lack of habitat diversity. Just six (6) species of non-native birds were recorded during two (2) site visits.

No Endangered Blackburn's sphinx moths, eggs, or larvae were found during the survey and none of their specific host plants were found growing in the project area.

b. Potential Impacts and Mitigation Measures

The Biological Resources Report found no federally endangered or threatened species (USFWS 2017) on the project site. As such, the Biological Resources Report concluded the proposed project will not have a significant negative impact on the flora and fauna resources in this part of Central Maui. Refer to **Appendix "C"**.

8. Archaeological Resources

a. Existing Conditions

An Archaeological Assessment Report (AAR) was prepared by Archaeological Services Hawaii, LLC with fieldwork conducted in March 2017. The survey addressed the entire 14.416 acres of the property. See **Appendix "D"**. The AAR consisted of a pedestrian survey with mechanical test excavations. A total of 11 backhoe trenches were excavated across the parcel and were negative for buried cultural remains and intact dune matrices.

The site has been extensively altered through drainage improvements comprised of a retention trench on the western portion of the parcel, previous sugar cane cultivation, and past sand mining activity where no inland sand dunes appear to be in existence today. Despite these alterations, the subject vicinity is positioned within a culturally sensitive area, and in close proximity to traditional burial features and a few historic period sites; a historic road bed (Site 5963), a sugar cane flume (Site 5967),

and the Kama Ditch (Site 5474). None of these sites, however, are located on the subject property. Refer to **Appendix "D"**.

b. Potential Impacts and Mitigation Measures

The negative results for buried cultural remains exemplify the disturbances that occurred on the site. The AAR concluded the probability of encountering *in situ* cultural remains is low, however, given the property's close proximity to known, unmarked traditional sand burials, disturbed burial features and/or remnant historic properties may be existing. An archaeological monitoring program is recommended for all future ground altering activities at the project area.

Following publication of the Draft EA, the Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD) accepted the AAR in their comment letter dated April 30, 2018 and recommended archaeological monitoring. See Chapter XIII of this EA for a copy of SHPD's letter. Accordingly, the Applicant will prepare an archaeological monitoring plan in compliance with the SHPD's recommendation.

9. Cultural Resources

a. Existing Conditions

A Cultural Impact Assessment (CIA) was conducted by Scientific Consultant Services, Inc. (SCS) (August 2017). See **Appendix "E"**. The CIA identifies the possibility of *"on-going cultural activities and resources within the project area, or its vicinity, and assesses the potential for impacts on these cultural resources".*

The CIA contains archival and documentary research, as well as communication with organizations and individuals having knowledge of the project area, its cultural resources, and its practices and beliefs.

The project area is located in the Wailuku and Waikapū Ahupua'a, Wailuku District, Maui Island, Hawai'i. According to the CIA, the Wailuku and Waikapū Ahupua'a are located in the land division ('okana) which was once known as "Nā Wai 'Ehā" or "four waters". This area was comprised of the four (4) great valleys of Waihe'e, Waiehu, Wailuku, and Waikapū which cut far back into the slopes of West Maui and drain the eastward watershed of Pu'u Kukui. The Wailuku Ahupua'a was politically, ceremonially and geographically important during traditional times. Wailuku was considered a "chiefly center" where many of the chiefs and

much of the population resided near or within ʻIao Valley and lower Wailuku. Refer to **Appendix "E"**.

As the sugar industry developed in the mid-1800, more and more land was leased or purchased for what had become a profitable endeavor. Claus Spreckels was able to acquire half interest in 16,000 acres of land in Waikapū commons and was able to lease 24,000 acres of Crown land. Spreckels started the Hawaiian Commercial Company and built the Haiʻku ditch system above the Hamakua Ditch for his newly acquired land. In 1882 Spreckels reorganized his company as Hawaiian Commercial and Sugar Company (HC&S). Later he constructed the Waiheʻe Ditch which brought water from West Maui to the HC&S Waiʻale Reservoir. In 1898 Spreckels sold his stock in HC&S to James Campbell in partnership with Alexander and Baldwin. Refer to **Appendix "E"**.

Land use in the Wailuku and Waikapū Ahupuaʻa in the mid-19th and early 20th century was largely devoted to the sugar industry. Historic utilization of the Wailuku-Waikapū landscape near the project area focused on industrial-levels of cultivating sugar cane and pineapple. Lands in the vicinity of the project area remained in cultivation until the demise of the Wailuku Sugar Company in 1999. HC&S, the last remaining sugar plantation on Maui, closed at the end of 2016.

b. <u>Potential Impacts and Mitigation Measures</u>

SCS requested consultation from 14 individuals and organizations who may have knowledge pertaining to the collection of cultural resources and/or traditional cultural practices currently or previously conducted in the vicinity of the project area. One (1) written response was received. Also, interviews were conducted with Clayton Suzuki, a former employee of the Wailuku Sugar Company, and Roger Yamaoka, a long-time Waikapū community member. Both interviewees were unaware of any traditional cultural practices in the area. No traditional cultural practices or activities associated with access, subsistence, cultural or religious purposes were identified during the consultation process. Refer to **Appendix "E"**.

According to SCS, the area has not been used for traditional cultural purposes in recent times. Based on historical research and the consultation process, SCS concluded *"Hawaiian rights related to gathering, access or other customary activities in the project area will not be affected and there will be no direct adverse effect upon cultural practices or beliefs"*. According to the CIA the exercise of native Hawaiian rights, or any ethnic

group, related to gathering, access or other customary activities will not be affected by the proposed project.

Accordingly, the proposed project is not anticipated to adversely affect cultural resources.

10. Air Quality

a. Existing Conditions

There are no point sources of airborne emissions in the immediate vicinity of the project site. Although minimal, airborne pollutants are largely attributable to vehicular traffic on the surrounding roadways. Wind blown dust from surrounding fallow fields is another source of indirect emissions in the region. These sources, however, are intermittent and prevailing winds quickly disperse the particulates generated by these temporary sources. Overall, the air quality in the region is considered good.

b. Potential Impacts and Mitigation Measures

In the short term, construction-related activities for the proposed project will be the primary source of airborne pollutants affecting the surrounding area. Site work involving clearing, grubbing, and grading operations will generate fugitive dust. Appropriate BMPs, such as frequent watering of exposed surfaces and regular maintenance of construction equipment will be utilized to minimize air quality impacts associated with project construction.

The proposed project is not an action which will generate adverse long-term air quality impacts.

11. Noise Quality

a. Existing Conditions

There are no fixed noise generators in the vicinity of the project site. Existing background noise levels are primarily attributable to vehicular traffic along the surrounding roadways.

b. Potential Impacts and Mitigation Measures

The State Department of Transportation (SDOT) Airports Division noted the project site is located outside of the 55 DNL (day-night average noise level) contours for Kahului Airport. The Applicant and future residents should be aware of the proximity of the airport and potential of single event noise from aircraft operations.

Ambient noise conditions may be temporarily affected by construction activities. Heavy construction machinery, such as backhoes, dump trucks, front-end loaders, and material-transport vehicles are anticipated to be the dominant noise-generating sources during the construction period of the proposed project.

In order to mitigate noise impacts, construction will be limited to daylight hours. Construction noise will be minimized through use of applicable BMPs, such as proper maintenance of construction equipment and properly muffled equipment. In the long term, the proposed project is not anticipated to have adverse noise quality impacts.

12. Hazardous Materials

a. Existing Conditions

The project site is former sugar cane land. The agricultural use of the property ceased in the 1980s and the project site has been fallow since. Due to its former agricultural use, the potential for residual hazardous materials, such as pesticides, was examined through the preparation of a Phase I Environmental Site Assessment (ESA).

b. Potential Impacts and Proposed Mitigation Measures

An ESA was conducted for the subject property by Bureau Veritas North America, Inc. on March 7, 2016. The ESA was conducted to determine if the site may be contaminated with hazardous or toxic substances or wastes resulting from the past site activities, in particular sugar cane cultivation.

Site reconnaissance and records review for the subject property and the surrounding area was conducted and revealed no evidence of recognized environmental conditions, as defined by American Society for Testing and Materials (ASTM), in connection with the property. The ESA noted that agricultural chemicals were not detected at or above regulatory levels. The ESA noted that this historically recognized environmental condition is not considered a current recognized environmental condition because the subject property has received a "No Further Action Determination" letter from the Department of Health (DOH), Hazard Evaluation and Emergency Response (HEER) Office with regards to elevated agricultural chemicals in the soil.

Based on HEER's findings, there are no hazardous or regulated substances on the project site and, as such, no adverse impacts are anticipated from hazardous materials.

13. Scenic and Open Space Resources

a. Existing Conditions

The West Maui mountains, Haleakalā to the east and Kahului Bay and the Pacific Ocean to the northeast define the scenic resources in Central Maui. Immediately south of the project site are church properties that currently provide an open space buffer between Wailuku and Waikapū Towns. However, the lots are urban lots that will be developed with church facilities. Specific timetables for the development of these lots, beyond the existing worship facility on the Valley Isle Fellowship Church lot, has not been defined.

The project site is also bordered by Kehalani Village Center to the north and the Maui Lani Parkway Commercial complex to the east. According to the Kehalani Project District zoning, buildings have a maximum height of four (4) stories, not to exceed 45 feet in height, while in the Maui Lani Project District zoning commercial and apartment buildings have a maximum height of three (3) stories, not to exceed 48 feet. Both the Kehalani Village Center and Maui Lani Parkway commercial complex have not constructed three (3) or four (4) story buildings, however, it is not fully developed and by zoning can construct such buildings in the future. At this time, the Kehalani Village Center does not have multiple story buildings, while the Maui Lani project has 2-story buildings. Also, the adjacent church lots by zoning are allowed to construct church structures 40 feet in height. The proposed Wailuku Apartment Rental Housing Project proposes to construct three (3) story structures with a maximum height not to exceed 40 feet similar to structures that can be constructed in the surrounding properties.

Although the project is not located within a scenic corridor, from Honoapi'ilani Highway the public is able to see Kahului Bay and the Pacific Ocean in the distance to the northeast over a portion of Wailuku Town and a portion of Kahului Town. The public is also able to view Haleakalā toward the southeast from Honoapi'ilani Highway. See **Appendix "F"**.

b. Potential Impacts and Mitigation Measures

The existing topography of the site slopes from approximately 360 feet at the southwest corner at Honoapi'ilani Highway to approximately 306 feet at the northeast corner of the property near the intersection of Ku'ikahi Drive and Wai'ale Road. The sloping topography provides an opportunity to grade the site so that it will help to visually lower the height of the buildings as viewed by the public from Honoapi'ilani Highway. A view

analysis prepared on February 9, 2018, for the project from the same vantage points as the photographs of the existing views depicts the public's view of the buildings from Honoapi'ilani Highway. Towards the northeast Kahului Bay and the Pacific Ocean will be visible over the rooftops of the proposed building. Also, towards the southeast Haleakalā will continue to be visible in the background of the proposed buildings. Refer to **Appendix "F"**.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Land Use and Community Character

a. Existing Conditions

From a regional perspective the project site is located immediately south of the urbanized areas of Wailuku Town. The project site is adjacent to a diverse setting of physical and socio-economic environments. Wailuku Town serves as the commercial, governmental, and residential center of the region, with the master planned communities of Kehalani and Maui Lani located in close proximity of the project area.

b. Potential Impacts and Proposed Mitigation Measures

The project site is identified as a future growth reserve area on the Wailuku-Kahului Community Plan. The proposed apartment rental project is compatible with the adjacent residential, commercial, and public/quasi-public land uses and community character of Wailuku Town. Additionally, the site is also located within the Urban Growth Boundary of the Maui Island Plan (MIP).

The proposed project is not anticipated to have an adverse effect on land use and community character.

2. Population and Economy

a. Existing Conditions

The population of the island of Maui has exhibited relatively strong growth over the past decade. According to the U.S. Census, the resident population of the island in 2010 was 144,444, an increase of 22.8 percent from the 2000 population of 117,644 (2000 and 2010 Census). Maui's resident population is expected to grow to 162,370 by 2020 and 186,254 by 2030 (SMS, 2006).

The project area is located in the Central Maui region of the island. The resident population in the Wailuku-Kahului region has increased by 31.2 percent from 41,503 in 2000 to approximately 54,433 in 2010 (2000 and 2010 Census). The Wailuku-Kahului region is also expected to grow to 60,877 by 2020 and 71,233 by 2030 (SMS 2006).

As of April 2018, Maui County's non-seasonally adjusted unemployment rate was 2.0 percent, a decrease from 2.8 percent in April 2017. Similarly, Maui island's non-seasonally adjusted unemployment rate in April 2018 was 1.9 percent, a decrease from 2.7 percent in April 2017. Maui County's and Maui island's non-seasonally adjusted unemployment rate decreased by 0.8 percent.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project involves establishing apartment rental housing for Maui's growing population. In the context of the County of Maui's population projections through the year 2030, the proposed project is not anticipated to alter population trends. New rental housing inventory is anticipated to support the island's resident population.

On a short-term basis, the project will generate construction and construction-related employment. Over the long term, the proposed project is not anticipated to alter employment trends.

3. Housing

a. Existing Conditions

The County of Maui 2030 General Plan – Countywide Policy Plan notes that *"shelter is among the most basic of human needs"*. The affordability, quality, and location of housing – including the degree of crowding within the home and within the neighborhood – play an enormous role in the quality of life of Maui County's residents.

According to the SMS Hawaii Housing Planning Study, 2016 prepared for the County of Maui, a significant number of Maui households live in overcrowded conditions or are "doubled-up" with other families. According to the SMS report, crowding continues to be a problem in the housing market and in 2016 affected 21.4 percent of households in Maui County.

The population growth factors related to housing demand include total population, households, and household size. According to the study, between 2010 and 2015, the total population increased by 19.3 percent,

number of households by 12.5 percent and average household size by 5.8 percent. The data is consistent with a housing market where demand is greater than supply.

According to the Hawaii Housing Planning Study 2016, renters in Maui County represented 39 percent of households and paid the second highest amount ($2,106) to cover their monthly housing expenses. Affordable units were most limited in Maui County, with just 48.6 percent of the island's units affordable to Maui's lower income households.

Maui's housing supply in the year 2010 was 50,215, of which 32 percent or approximately 16,293 were located in the Wailuku-Kahului Community Plan Region. This region accounts for the largest percentage of housing units on the island. Demand for housing in this community plan region by year 2020 is estimated to be 21,383, while by year 2030 it is estimated to be 25,855 (SMS, 2016).

The Central Maui Rental Market Study (January 22, 2017) was prepared by Paul Cassiday Real Estate Market Research. See **Appendix "G"**. Respondents indicated in the Market Study that 18 percent of owner-occupied units and 26.6 percent of rental units experience overcrowding or doubling up on Maui. In the Central Maui area, 22.7 percent experience overcrowding or doubling up.

The Central Maui Market Rental Demand Study reviewed the rental trend in the Wailuku-Kahului region between 2012 and 2016, as summarized in **Table 3**.

Table 3. Wailuku-Kahului Rental Trend 2012 Through 2016

Year	Number of Listings				Rents (Dollars)			
	Studio	1-BR	2-BR	3BR	Studio	1-BR	2-BR	3-BR
2012	15	18	31	7	863	985	1,184	1,635
2013	12	17	29	6	1,035	1,009	1,353	1,798
2014	5	8	15	6	917	1,106	1,429	2,048
2015	5	7	7	3	1,231	1,322	1,793	2,183
2016	5	14	21	4	1,174	1,279	1,650	2,098
Source: Central Maui Rental Market Study, 2017.								

According to the data, the number of studio, 1-bedroom, and 2-bedroom units in the lower price segment has been trending lower. In addition, the highest population of listings is around the $900.00 to $1,100.00 range for studios, $1,799.00 to $1,899.00 for 1-bedroom units and $2,100.00 to $2,299.00 for 2-bedroom units. For 3-bedroom units, it is difficult to determine a comparative market opportunity due to the lack of inventory.

b. Potential Impacts and Mitigation Measures

According to the SMS Hawaii Housing Planning Study 2016, the Department of Business Economic Development and Tourism (DBEDT) forecasted the future housing demand for Maui County between 2015 and 2025 to be 13,949 units. The total forecasted (2015-2025) single-family and multi-family units by U.S. Department of Housing and Urban Development (HUD) income classification (Percent of Area Median Income (AMI)) for Maui County for owner occupied and rental units are summarized in **Table 4**.

Table 4. DBEDT Rental Housing Forecast by HUD Income Classification (Percent of AMI)

	Less than 30 Percent	30-50 Percent	50-60 Percent	60-80 Percent	80-120 Percent	120-140 Percent	140-180 Percent	180+ Percent	Total
Total Demand	2,947	2,775	1,414	2,393	1,626	1,493	500	801	13,949
Total Ownership Units	1,079	824	351	1,151	1,308	1,292	469	766	7,240
Single-Family Ownership	1,022	783	234	1,022	1,112	1,032	368	610	6,183
Multi-Family Ownership	57	41	117	129	196	260	101	156	1,057
Total Rental Units	1,868	1,951	1,063	1,242	318	201	31	35	6,709
Single Family	1,295	1,226	771	1,050	239	156	17	30	4,784
Multi-Family	573	725	292	192	79	45	14	6	1,926

Source: SMS Hawaii Housing Planning Study, 2016.

These new units would need to be built within the next 10 years to meet new demand from changing demographics and economic conditions.

According to the Central Maui Rental Market Study, from 2000 through 2015 there has been an imbalance in the housing market where the production of new housing has lagged behind the need. As of 2015 it is estimated that there is a deficit of approximately 5,626 housing units. The Study also estimated that this deficit will continue at a rate of approximately 243 units per year. As such, the Study estimated that by 2020 the unmet housing need will increase by another 9,100 units, for a total unmet housing need of approximately 14,726 units.

The Study notes there is a significant portion of the local population that are "under housed" in the sense that they cannot find housing at prices affordable to their income. Approximately 25 percent of all households are at low income levels (80 percent of median income and below).

The Central Maui Rental Market Study noted that there has been no large scale dedicated rental projects on Maui since 1990 that were not subsidized. Given rising for-sale housing costs and high rents, the affordable inventory is fully occupied with a long wait list. The Study found only two (2) large scale rental projects in the study area, Piilani Gardens (200 units) and the Waterfront Apartments (113 units). Furthermore, there is not much in the pipeline. The Study noted the only project planned is by Catholic Charities for the Kane Street Elderly Housing project.

According to the Central Maui Rental Market Study, rental demand will come foremost from local families living on the island that are "workforce" and immediately above that segment. The Study estimates the potential demand for the unit mix proposed for the Wailuku Apartment Rental Housing Project, as follows in **Table 5**.

Table 5. Potential Unit Mix Versus Potential Housing Demand, Households Aged 25-54 by AMI

Bedrooms	AMI	Units	Potential Demand
1	80 Percent	60	534
1	100 Percent	50	486
2	120 Percent	71	288
1	Market	20	916+
2	Market	80	1,146+
3	Market	20	720+
Source: Central Maui Rental Market Study, 2017.			

In summary, the Central Maui Rental Market Study cites the following findings:

- The housing market on Maui continues to show more sales and higher prices, thus putting upward pressure on the rental market;
- The stock of housing on Maui continues to grow more slowly than the population, or the number of households living on Maui. This makes housing scarcer, and puts pressure upward on the rental market;
- The rejuvenation of two (2) major resorts on Maui continues, with the expectation that this will cause both higher inmigration of workforces to rebuild Kaanapali and Mākena resorts, and lead to higher visitor counts ultimately; and
- As the market conditions continue to improve, the proposed rental housing project can expect to see heightened demand, due to its Central Maui location.

The Wailuku Apartment Rental Housing Project is expected to have a positive impact on the housing market by increasing the inventory of rental units available, especially to those at the lower income level of Maui's AMI.

C. PUBLIC SERVICES

1. Solid Waste Collection and Disposal

a. Existing Conditions

Single-family residential solid waste collection service is provided by the Department of Environmental Management (DEM). Residential solid waste collected by County crews is disposed at the County's Central Maui Landfill, located four (4) miles southeast of the Kahului Airport. In addition to County-collected residential refuse, the Central Maui Landfill accepts residential and commercial waste from private collection companies.

Solid waste collection services for the project will be provided by a privately managed company and disposed at Maui County's Central Maui Landfill. The DEM supported the use of a privately managed company since they cannot assure such service.

b. Potential Impacts and Mitigation Measures

In 2007, the County of Maui's Integrated Solid Waste Management Plan (ISWMP) estimated the existing Central Maui Landfill (Phases IV to VI) had remaining capacity of 780,000 tons. Due to subsequent expansion of the landfill, the DEM estimates the current remaining capacity of the landfill to be 2.4 million tons, which is anticipated to accommodate waste collection needs through the Year 2032.

Construction-related waste will be disposed of in accordance with policy and practices established by the Solid Waste Division to ensure that there are no adverse impacts to the County's Central Maui Landfill.

2. Police, Fire, and Medical Facilities

a. Existing Conditions

Police protection for the Wailuku-Kahului region is provided by the Maui Police Department located at the Wailuku Station headquartered on Mahalani Street approximately two (2) miles northeast of the project area. The Maui Police Department provides investigative services, uniform patrol

services, technical support, and traffic services as stated in its mission to protect the residents on Maui County.

Fire prevention, protection, rescue, and emergency services for the Wailuku-Kahului region are provided by the Maui County Department of Fire and Public Safety. The department has two (2) stations to service the Wailuku-Kahului region, both in close proximity of the project site. The Wailuku station is located in Wailuku town approximately two (2) miles north of the project site and the Kahului station is located on Dairy Road in Kahului town approximately 4.0 miles east of the project site.

Maui Memorial Medical Center is managed by Kaiser Permanente and is the only major medical facility on the island. Acute, general, and emergency care services are provided by the 214-bed Maui Memorial Medical Center facility located on Mahalani Street, Wailuku, about two (2) miles northeast of the subject property.

In addition, Kaiser, Maui Medical Group, Maui Medical Clinic, and Liberty Dialysis Clinic provide health care for the island of Maui. These facilities are located in Wailuku and Kahului. Dental and other medical offices are also located within the Wailuku-Kahului region to serve its residents and visitors.

b. Potential Impacts and Mitigation Measures

As set forth in their letter dated October 19, 2017, the Maui Police Department (MPD) noted that, "there are no objections to the proposed Wailuku Apartment Rental Housing Project, from the Police standpoint, in regards to pedestrian and vehicular movement". In their letter dated April 16, 2018, the MPD requested consideration for the installation of sufficient lighting for the safety of crime, as well as the consideration of traffic. As noted in this EA document, onsite lighting will be provided in a manner which supports safety for pedestrians and motorists, and deterrence of crime. A Traffic Impact Assessment Report has also been prepared and further evaluated traffic impacts in Section D of this Chapter. The Department of Fire and Public Safety also did not have any objections to the proposed project per their letter dated November 2, 2017.

The proposed project is located within service areas for police, fire, and medical facilities and is not anticipated to adversely impact these services.

3. Educational Facilities

a. Existing Conditions

The State Department of Education (DOE) operates several schools in the Wailuku-Kahului region. Public school facilities within the Wailuku-Kahului District area include: two (2) high schools, Henry Perrine Baldwin High and Maui High (grades 9 to 12); two (2) intermediate schools, Iao Intermediate and Maui Waena Intermediate School (grades 6 to 8); and six (6) elementary schools (Grades K to 5), Wailuku Elementary, Waihe'e Elementary, Pōmaikai Elementary, Kahului Elementary, Lihikai Elementary, and Pu'u Kukui Elementary School.

The area is also served by several privately operated schools providing education for elementary, intermediate, and high school students. Privately operated schools serving the Wailuku-Kahului region include St. Anthony School (grades K to 12), Kaahumanu Hou Christian School (grades K to 12), Emmanuel Lutheran School (K to 6), and Maui Adventist School (grades 1 to 8).

The DOE's 2017-2018 school enrollment for their Central Maui schools are presented in **Table 6**.

Table 6. 2017 to 2018 DOE School Enrollment

School	Enrollment
Baldwin High School	1,361
Iao Intermediate School	953
Kahului Elementary School	964
Lihikai Elementary School	846
Maui High School	1,950
Maui Waena Intermediate School	1,176
Pōmaikai Elementary School	593
Pu'u Kukui Elementary School	778
Waihe'e Elementary School	685
Wailuku Elementary School	686
Source: Department of Education, 2018	

The University of Hawai'i-Maui College is a four-year college located on Ka'ahumanu Avenue in Kahului.

b. Potential Impacts and Mitigation Measures

According to the DOE, the project is expected to generate approximately 71 students. The schools serving the proposed project are Pu'u Kukui Elementary School, Maui Waena Intermediate School, and Maui High School. Pu'u Kukui Elementary School is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years. Maui Waena Intermediate School is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years. Maui High School is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years.

The DOE noted that the project is located within the Central Maui School Impact Fee District which was designated by the Board of Education on November 18, 2010 pursuant to Chapter 302A-1604, Hawai'i Revised Statutes (HRS), and will be subject to DOE's school impact fee. The project will comply with the requirement for school impact fees and will execute an Education Contribution Agreement with the DOE. Impacts on school facilities will be mitigated with payment of the impact fees, which for multi-family units, are assessed at $2,371.00 per unit in the Central Maui District.

4. Recreational Facilities

a. Existing Conditions

Within the Wailuku-Kahului Community Plan District, there are many recreational activities, including shoreline and boating activities at the Kahului Harbor and adjoining beach parks, and organized recreational activities provided/offered at County Parks. Within close proximity of the project site is Wai'ale Park, 0.25-mile north of the project site; Wailuku Elementary School Park and Kehalani Mauka Park, approximately 1.2 miles northwest of the project site; and Waikapū Community Center located about 1.4 miles southwest of the project area. Other Maui County-owned parks within the Wailuku-Kahului region are the Papohaku Park and Wailuku Community Center, War Memorial Athletic complex, Wailuku Little League baseball fields, the 65-acre Maui Regional Park, Maui Lani Parkway Park, Sakamoto Swimming Pool, and Keopuolani Regional Park. All of these County-owned recreational facilities are located within approximately 2 to 3 miles north and east of the project site.

In addition, there are several golf courses in the Wailuku-Kahului region located within close proximity of the project site. These include the Kahili

and Kamehameha Golf Courses, The Dunes at Maui Lani Golf Course, and the Maui County-owned Waiehu Golf Course. These golf courses are approximately 1 to 5 miles of the project site.

b. Potential Impacts and Mitigation Measures

The National Park and Recreation Association recommends that for every 1,000 persons a neighborhood park of 1.0 to 2.0 acres should be located within a radius of 0.25 to 0.50 mile. The nearest neighborhood park is the 3-acre Wai'ale Park located adjacent to the Hale Makana O Waiale housing project, within the recommended radius. Also, the Wailuku Apartment Rental Housing Project will provide recreational opportunities for its tenants with four (4) play areas, a swimming pool, community center/leasing office building, and barbeque area.

As noted previously, besides Wai'ale Park, there are several parks in the vicinity of the project site that are available to serve the future tenants. The project is not anticipated to adversely impact recreational resources in the area.

D. INFRASTRUCTURE

1. Roadways

a. Existing Conditions

The subject property is bounded by Honoapi'ilani Highway to the west, Ku'ikahi Drive to the north and Wai'ale Road to the east. A Traffic Impact Analysis Report (TIAR), updated on May 25, 2018, was prepared by Austin Tsutsumi & Associates. See **Appendix "H"**. The TIAR describes the major roadways within the vicinity of the project site.

Honoapi'ilani Highway is a north-south, two-way, two-lane undivided State of Hawai'i arterial highway linking Wailuku to Central, South, and West Maui. Speed limits range from 30 miles per hour (mph) to 45 mph. No vehicular access is allowed directly from the project site onto Honoapi'ilani Highway.

Ku'ikahi Drive is an east-west, two-way, two-lane undivided County collector roadway with speed limits ranging from 25 to 30 mph. There are curbs, gutters, and sidewalks on the northern side of the roadway along the Kehalani Village Center, as well as along the frontage of Walgreens. An access is proposed into the proposed project from Ku'ikahi Drive directly across the access driveway into the Kehalani Village Center.

Wai'ale Road is a north-south, two-way, two-lane undivided County collector roadway with a posted speed limit of 20 mph. The Wai'ale Road/Ku'ikahi Drive intersection is signalized with dedicated left turning lanes at the four-way intersection and a dedicated right turning lane from Ku'ikahi Drive onto Wai'ale Road. The remaining three (3) intersections have through/right turning lanes.

The area fronting Walgreens is improved with curbs, gutters, and sidewalks. The roadway south of the signalized intersection towards Waikapū is not improved with curbs, gutters, and sidewalks. There is an unimproved access into the project site providing access to the existing temporary office trailers.

East Waiko Road is an east to west, two-way, two-lane undivided County collector roadway with a posted speed limit of 20 mph. East Waiko Road extends from Kuihelani Highway to Honoapi'ilani Highway.

Kehalani Parkway is an east to west, two-way, four-lane divided County collector roadway with posted speed limits of 20 mph and 30 mph on either side of Honoapi'ilani Highway.

Based on the traffic counts, the weekday morning (AM) peak hour of traffic was determined between 7:00 a.m. and 8:00 a.m., while the afternoon (PM) peak hour was determined between 4:15 p.m. and 5:15 p.m.

The TIAR analyzed the following intersections.

Honoapi'ilani Highway/Kehalani Parkway: This is a signalized intersection with exclusive left-turn and right-turn lanes at all approaches. The channelized northbound and southbound right-turn movements include exclusive eastbound and westbound receiving lanes, respectively. All movements at this intersection operate at Level of Service (LOS) D or better during AM and PM peak hours of traffic, except for the eastbound left-turn movement which operates at LOS F and overcapacity conditions during the AM peak hour. For a portion of the AM peak hour, the eastbound left-turn movement operates with lines that extend to or beyond the existing left-turn storage lane and some vehicles may require two (2) cycle lengths to clear the intersection. Heavy traffic during a short period of time is reflective of typical school traffic conditions generally between 7:15 to 7:45 AM. The existing AM traffic lines were observed coming primarily from Pu'u Kukui School.

In addition, northbound traffic lines on Honoapi'ilani Highway were observed to be primarily from school traffic from Wailuku Elementary

School. At Aupuni Street traffic directed by a police officer was observed to create long lines for northbound vehicles for about 5 to 10 minutes reaching as far as the Kehalani Parkway intersection.

Honoapi'ilani Highway/Ku'ikahi Drive: This is a signalized intersection with exclusive left-turn and right-turn lanes on all approaches. The channelized northbound right-turn movement include an exclusive eastbound acceleration lane. All movements at this intersection currently operate at LOS D or better with no significant queueing observed during AM and PM peak hours of traffic.

Honoapi'ilani Highway/Waiko Road: All movements at this intersection currently operate at LOS C or better with no significant delays or queueing during the AM and PM peak hours of traffic.

Ku'ikahi Drive/Kehalani Village Center Driveway: This is an unsignalized T-intersection with exclusive left-turns in the eastbound and southbound directions. All movements at this intersection operate at LOS B or better during AM and PM peak hours, except for southbound left turn movement which operates at LOS E(D) during the AM(PM) peak hours of traffic.

Wai'ale Road/Waiko Road: This is an unsignalized T-intersection with shared lanes on all approaches and the southbound approach stop-controlled. All movements operate at LOS B or better with no significant delays or traffic back-up during the peak hour of traffic.

Wai'ale Road at Ohana Hana Loop, Nokekula Loop, Haawi Street and Kokololio Street: These are unsignailized T-intersections servicing the Waikapu Gardens Phase I and II developments. All movements at these intersections operate a LOS B or better with no significant delays during the AM and PM peak hours of traffic.

Kamehameha Avenue/Maui Lani Parkway: This is an unsignalized four-way stop controlled intersection with exclusive left-turn lanes on both approaches on Kamehameha Avenue. This intersection is located 700 feet north of Pomaikai Elementary School. Each approach includes flashing beacons with stop signs, and marked crosswalks are provided on the southwest leg of Kamehameha Avenue and the northwest leg of Maui Lani Parkway.

The northbound through/right-turn movement, southbound through/right-turn movement, eastbound approach, and westbound approach operate at LOS F with some overcapacity conditions during the AM and PM peak

hours of traffic. This is primarily due to regional traffic between the Waikapū-Wailuku-Kahului regions. Lines of traffic were inconsistent and varied in length throughout the peak hours, with a short period of extensive southbound queueing during the AM peak hour and periodic eastbound queueing during the AM and PM peak hours of traffic.

Waiʻale Road/Kaohu Street/Oluloa Drive: This is a four-way stop intersection with shared left-turn/through/right-turn lanes along Waiʻale Road and the westbound approach along Oluloa Drive. An exclusive left-turn lane and shared through/right-turn lane is provided along the eastbound approach on Kaohu Street.

Traffic was generally observed to progress unimpeded along Waiʻale Road during the AM peak hour, except between 7:30 to 7:50 AM, where southbound traffic on Waiʻale Road could queue back near to Wells Street. Northbound traffic on Waiʻale Road was observed to slowly progress through the intersection. For a brief 5 to 10 minute period (7:30 AM) northbound traffic spilled back at varying lengths from the four-way stop to the upstream Waiʻale Road/Waiinu Road intersection, causing congestion that stretched back towards Kuʻikahi Drive. The northbound and southbound approaches along Waiʻale Road operate at or over-capacity conditions with LOS F. Congestion and queueing along Waiʻale Road generally dissipated around 7:50 to 7:55 AM.

Various constraints limit options to implement mitigative measures to curb congestive conditions at the intersection and along Waiʻale Road. Although a signal is not currently warranted at this intersection, in the event traffic increases in the future to warrant a signal, the installation of a traffic signal system will be difficult to implement given the existing alignment of the roadway and right-of-way constraints. Waiʻale Road may also require widening to provide exclusive left-turn lanes on Waiʻale Road, given the high volume of through traffic along this corridor.

A roundabout is likely infeasible due to the existing right-of-way constraints as well as the skewed approach from Oluloa Drive that inhibits perpendicular intersection approaches necessary for roundabouts. Mitigation to remove stop control along the Waiʻale Road approach (creating a two-way stop controlled intersection) will also be negatively impacted by the skewed approach from Oluloa Drive, making it difficult for vehicles along Oluloa Drive to detect approaching free flowing northbound vehicles along Waiʻale Road. Right-of-way acquisition may be needed to provide more space for the options of a traffic signal, roundabout, widening

improvements and/or the realignments of Waiʻale Road and Oluloa Drive to provide perpendicular intersection approach angles.

Waiʻale Road/Waiinu Road: This is an unsignalized T-intersection with the minor westbound approach of Waiinu Road being stop controlled. In both the AM and PM peak hours the westbound shared left-turn/through lane operates at LOS F and overcapacity conditions due to lengthy delays.

Northbound congestion spills back into the intersection from the Waiʻale Road/Kaohu Street/Oluloa Drive four-way stop controlled intersection during portions of the AM peak hour, causing congestion that stretched back towards Kuʻikahi Drive. Northbound congestion is further impacted at this intersection due to heavy northbound right-turn movements, which reduces northbound speeds and decreases progression along Waiʻale Road. Some northbound vehicles along Waiʻale Road also stopped within the through travel lane to allow southbound left-turn and westbound left-turn vehicles (ranging from 1 to 6 vehicles at a time) to turn onto or off of Waiʻale Road, which contributed to the lengthy platoons.

Traffic during the PM peak hour along Waiʻale Road operated smoothly, but traffic back-up continued to be observed along the westbound leg of Waiinu Road. Traffic back-up along the westbound approach varies throughout the peak period, depending on gaps in traffic and the occurrence of vehicles stopping within the through lane to allow westbound vehicles to turn onto Waiʻale Road.

The need for roadway widening and/or traffic control mitigations at this intersection were previously identified by various agencies, but has stalled due to right-of-way constraints.

Waiʻale Road/Olomea Street: This is an unsignalized T-intersection with exclusive left-turn and right-turn lanes on all approaches. During the AM and PM peak hours of traffic, the eastbound left-turn movement operates at LOS F and overcapacity conditions. During the AM peak hour, due to northbound congestion along Waiʻale Road, observations indicated that some northbound vehicles along Waiʻale Road stopped within the through lane to allow eastbound left-turn vehicles to turn on Waiʻale Road, which contributed to the northbound congestion. A signal may be warranted at this intersection. As a temporary mitigative measure a median refuge lane may help reduce eastbound left-turn vehicle delays by allowing vehicles to turn onto Waiʻale Road with a two (2) stage approach, turning left into the refuge lane after finding gaps in southbound traffic, then merging into the Waiʻale Road through lane after finding gaps in northbound traffic.

Waiʻale Road/Kaupo Street: This is an unsignalized T-intersection with exclusive left-turn and right-turn lanes along the Kaupo Street approach and shared northbound through/left-turn and shared southbound through/right-turn lanes along Waiʻale Road. Eastbound left-turn movements operate with relatively higher delays and LOS F/E conditions during the AM(PM) peak hours. Observations indicated that some northbound vehicles along Waiʻale Road stopped within the through travel lane for left-tuning vehicles which contributed to the northbound congestion spilling back to Kuʻikahi Drive during the AM peak hour. An exclusive northbound left-turn lane or a median refuge lane may be considered to improve operations at this intersection and reduce vehicle spill back into Kuʻikahi Drive.

Waiʻale Road/Kuʻikahi Drive: This is a signalized intersection with exclusive left-turn lanes on all approaches and an exclusive right-turn lane on the westbound approach. All movements at this intersection operate at LOS C or better during AM and PM peak hours of traffic; however, lines were observed in the AM peak for about 20 to 30 minutes beyond the length of the eastbound left-turn storage lane to the Kehalani Village Drive or as far as Honoapiʻilani Highway. These lines occur at variable lengths and are dependent on existing northbound lines that spill back from Waiʻale Road into the Waiʻale Road/Kuʻikahi Drive intersection, which limits full progression for eastbound left-turning vehicles.

b. Potential Impacts and Proposed Mitigation Measures

The project's TIAR estimated traffic growth for Base Year 2021 at an anticipated rate of approximately 1.9 percent per year. By year 2021, the TIAR anticipated the following nine (9) developments would contribute to traffic increases. See **Figure 12**.

- Waikapū Light Industrial Project
- Waiko Baseyard Light Industrial Project
- Central Maui Regional Sports Complex
- Kehalani Village Center
- Maui Lani Village Center
- Waiʻale Affordable Housing



Source: Austin, Tsutsumi & Associates, Inc.

Figure 12

Wailuku Apartment Rental Housing Project

Map of Anticipated Developments by Base Year 2021

NOT TO SCALE

Prepared for: Wailuku Legacy LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Anticipated 2021 DevelopmentsREV

- Kehalani Mauka
- Waikapū Country Town
- Waikapū 201-H Affordable Housing

The anticipated increase in traffic attributed to each development is identified in the following **Table 7**.

Table 7. Total Trips Generated by Known Developments in Project's Vicinity[1]

Known Development	*Land Use*	*Units*	*AM Peak Hour*			*PM Peak Hour*		
			Enter	*Exit*	*Total*	*Enter*	*Exit*	*Total*
Waikapu Light Industrial Project	Industrial Park	8.5 acres	74	15	89	21	79	100
Waiko Baseyard Light Industrial Development	Light Industrial, Retail	19.7 Acres, 100,000SF	219	86	305	220	351	571
Central Maui Regional Sports Complex	County Park, Soccer Complex	13 Acres, 12 Fields	9	6	15	144	71	215
Kehalani Village Center[2]	Commercial	34,000 SF	10	7	17	70	75	145
Maui Lani Village Center (formerly VMX)[3]	Commercial, Office, Warehouse	120,000 SF	121	28	149	57	132	189
Wai'ale Affordable Housing	Single-Family Residential	70 Units	15	44	59	49	28	77
Kehalani Mauka[4]	Single-Family, Multi-Family Residental	246 SF 138 MF	57	192	249	202	114	316
Waikapū Country Town[5]	Single-Family Residential	150 SF	28	84	112	95	56	150
Waikapū 201-H Affordable Housing[6]	Single-Family, Multi-Family Residential	68 SF 12 MF	17	51	68	54	32	86

Note:
1. Shows trips generated by known developments in the vicinity of the Project. Not all traffic generated by these developments travel through the study area of this TIAR, since some traffic will be routed to various roadways and intersections that were not included in this TIAR.
2. Kehalani Village Center partially completed with 64,730 SF of occupied space with Longs Drugs, Foodland, Foodland Gas and McDonalds. Trips shown account for additional 34,000 SF of commercial space completed by Year 2021. Since publication of the Draft EA, project trip figures in the AM and PM peak hours shown in **Table 7** have been updated for Kehalani Village Center.
3. Maui Lani Village Center projections based on latest assumptions for growth. Majority of expansion attributed to lower trip generating office and warehouse land uses. Since publication of the Draft EA, project trip figures in the AM and PM peak hours shown in Table 7 have been updated for Maui Lani Village Center.
4. Kehalani Mauka projections based on latest assumptions for growth.
5. Initial residential phase as identified in the Waikapu Country Town Final EIS dated December 2016, assumed to be completed by Year 2021.
6. The project trip figures for Waikapu 201-H Affordable Housing have been included in **Table 7** since publication of the Draft EA.

Planned Roadways

Although the Waiʻale Extension and Waiko Road Extension are planned in the future, these improvements are unlikely to be constructed by 2021 and are not included in the TIAR. Also, at the Waiʻale Road/Waiinu Road intersection, a traffic signal is identified in the Statewide Transportation Improvement Program (STIP). However, it is unknown whether this improvement will be constructed by 2021 and was not included in the TIAR. At the Maui Lani Parkway/Kamehameha Avenue intersection, a single lane roundabout is planned to be constructed and has been included in the TIAR.

Base Year 2021 (Without Project)

Honoapiʻilani Highway/Kehalani Parkway: The eastbound left-turn movement will continue to operate at over-capacity and LOS F during the AM peak hour of traffic. There are no identified or planned improvements for this intersection. As noted under existing conditions, heavy traffic during a short period of time is reflective of typical school conditions, primarily from school traffic from Puʻu Kukui Elementary School.

Kuʻikahi Drive/Kehalani Village Center Driveway: The southbound left turning movement will worsen to operate at LOS F during the AM and PM peak hours of traffic, however, will continue to operate with relatively low volume at 30(45) vehicles in the AM(PM) peak hours of traffic.

Kamehameha Avenue/Maui Lani Parkway Roundabout: All movements will operate at LOS D or better, with the exception of the southbound Kamehameha Avenue approach, which is forecast to operate at LOS E during the AM peak hour of traffic.

Waiʻale Road/Waiinu Road: No improvements are planned and is expected to continue to operate at LOS F and over capacity conditions during AM and PM peak hours of traffic.

The STIP identifies a traffic signal at this intersection. For future planning purposes, exclusive left storage lanes and/or median refuge lanes along Waiʻale Road could be considered to help mitigate the Waiʻale Road northbound AM traffic flow.

Waiʻale Road/Kaupo Street: No improvements are planned and is expected to operate at LOS E/F and over capacity conditions.

Waiʻale Road/Olomea Street: Although traffic signal is warranted, there are no improvements planned and this intersection is expected to operate at LOS E/F and over capacity conditions.

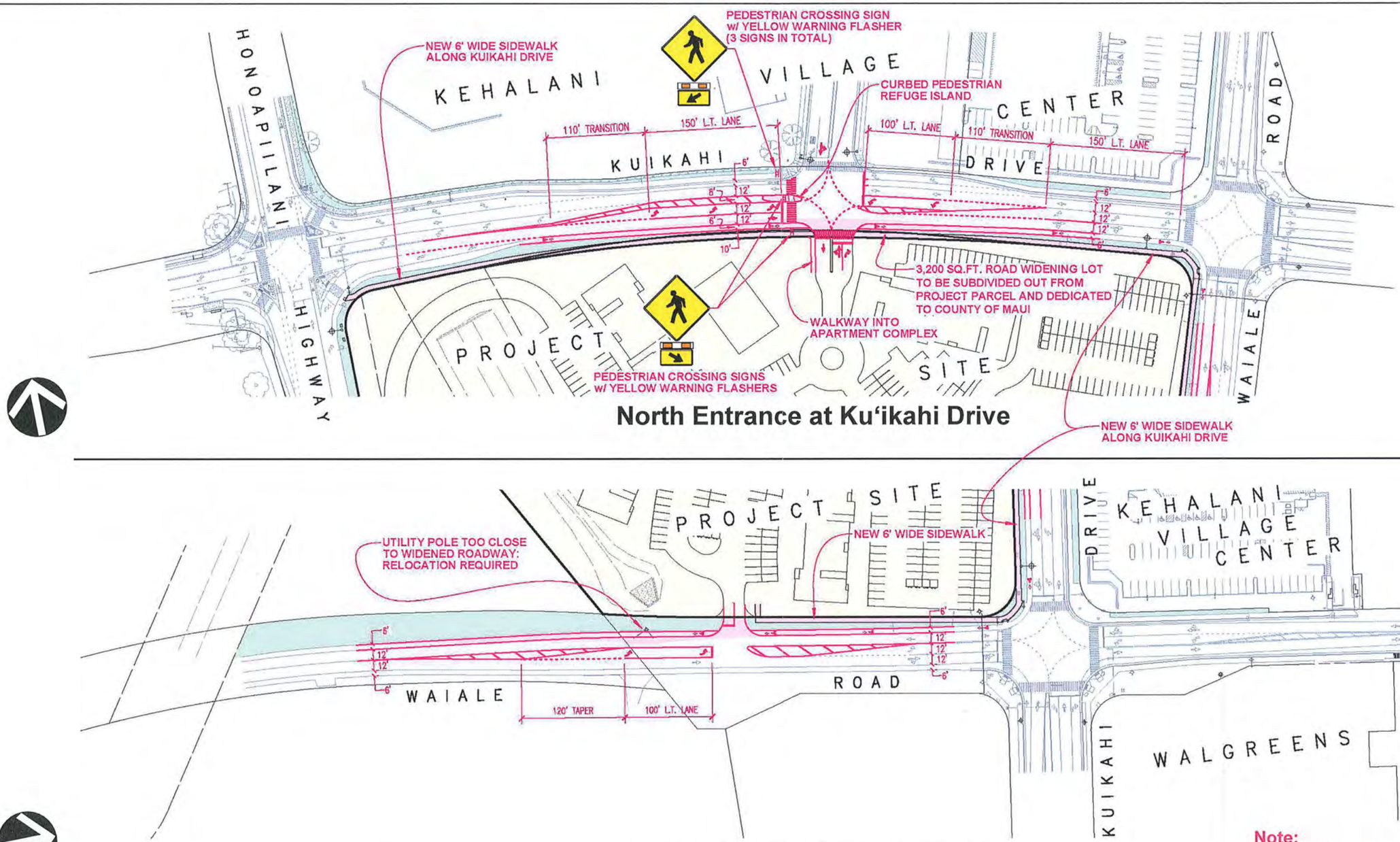
Waiʻale Road/Kaohu Street: No improvements are planned and is expected to operate at LOS E/F and over capacity conditions. A traffic signal may be warranted, however, right-of-way constraints may make it difficult to implement.

To relieve traffic congestion, the State Department of Transportation (SDOT) and County Department of Public Works (DPW) encourage transportation demand management measures, such as programs that promote the use of transit, walking, biking, and alternative modes of transportation.

Initiatives such as the SDOT Bike Plan Hawaii Master Plan and County of Maui (COM), Department of Public Works (DPW) Central Maui Pedestrian and Bicycle Master Plan for 2030 identifies various corridors for future bike and pedestrian facilities. As such, the project proposes to construct bike lanes and sidewalks along Kuʻikahi Drive and Waiʻale Road. Also, the existing crosswalks at the signalized intersection and the proposed mid-crossing and beacon on Kuʻikahi Drive will provide safe pedestrian access to the Kehalani Village Center and further north to the existing bus stops.

According to the County of Maui, Department of Transportation (CDOT), there are three (3) bus routes that operate in the vicinity of the project site. The nearest bus stop is approximately 0.3 mile north from the project site near the Ka Hale A Ke Ola Resource Center on Waiʻale Road and on Kamaʻole Street in the Kehalani development. CDOT commented that providing interconnecting sidewalk and ample lighting in the evening is necessary for walkable communities and for the safety of potential public transit riders. Lights near the exterior of the project site, especially at the driveways, are expected to spread out toward the streets providing ample lighting in the evening.

The project proposes to extend the pavement fronting the project frontage on Kuʻikahi Drive and Waiʻale Road for a bike lane and to provide on-grade sidewalks along both roadways. See **Figure 13** and **Figure 14**. Also, at the Kuʻikahi Drive entrance to the project, a mid-block crosswalk and curbed pedestrian refuge island is proposed to provide safe pedestrian access from the proposed project to the Kehalani Village Center. Refer to **Figure 13**. Crosswalks at the signalized intersections of Honoapiʻilani Highway/Kuʻikahi Drive and Waiʻale Road/Kuʻikahi Drive will provide safe pedestrian access and connectivity with the surrounding uses, especially access to the bus stop fronting the Ka Hale A Ke Ola Resource Center on Waiʻale Road.



Source: Warren S. Unemori Engineering, Inc.

Figure 13

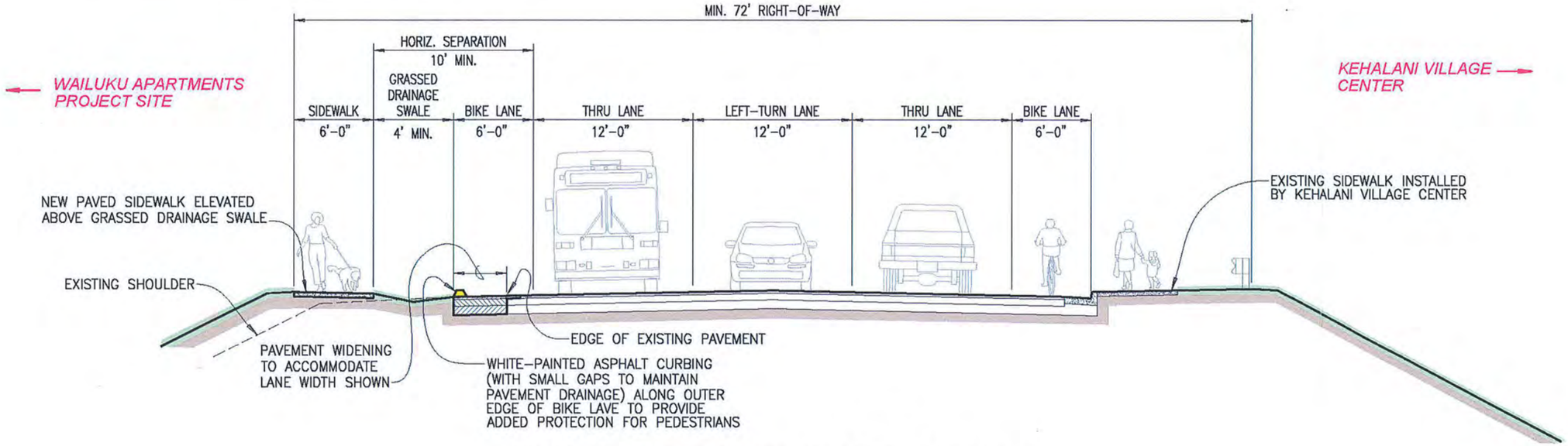
Wailuku Apartment Rental Housing Project

Typical Street Sections - Ku'ikahi Drive and Wai'ale Road

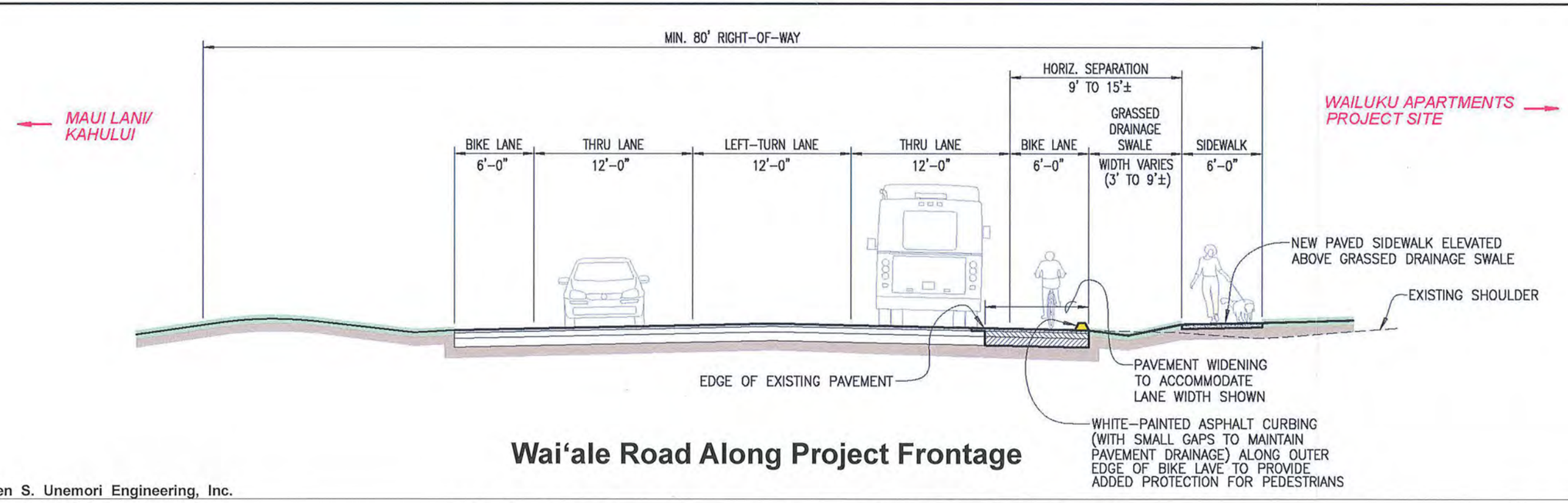
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Prepared for: Wailuku Legacy LLC

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Ku'ikahi Drive Along Project Frontage



Wai'ale Road Along Project Frontage

Source: Warren S. Unemori Engineering, Inc.

Figure 14

Wailuku Apartment Rental Housing Project

Typical Street Sections - Ku'ikahi Drive and Wai'ale Road

NOT TO SCALE

Prepared for: Wailuku Legacy LLC

MUNEKIYO HIRAGA

Base Year 2021 With Project

Traffic generated by the proposed project was added to Base Year 2021 conditions. According to the TIAR, all study intersections are forecasted to operate with LOS similar to Base Year 2021 conditions.

Table 8 shows the results of the LOS analysis of the studied intersections.

Table 8. Level of Service Analysis

Intersection	Existing Conditions						Base Year Without Project (2021)						Future Year With Project (2021)					
	AM			PM			AM			PM			AM			PM		
	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS
1: Honoapiilani Hwy & Kehalani Pkwy																		
NB LT	17.9	0.59	B	12.0	0.39	B	19.8	0.71	B	16.3	0.62	B	20.1	0.73	C	16.6	0.64	B
NB TH	26.6	0.77	C	15.5	0.55	B	28.1	0.80	C	17.6	0.62	B	28.9	0.82	C	17.6	0.62	B
NB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
EB LT	59.2	0.97	E	22.0	0.39	C	157.5	1.24	F*	26.1	0.49	C	169.5	1.27	F*	26.4	0.49	C
EB TH	21.6	0.38	C	22.5	0.20	C	26.2	0.47	C	27.5	0.31	C	26.5	0.47	C	27.8	0.31	C
EB RT	30.6	0.77	C	24.2	0.52	C	92.4	1.06	F*	29.6	0.59	C	98.2	1.08	F*	30.3	0.63	C
WB LT	27.4	0.12	C	24.5	0.05	C	30.6	0.14	C	29.7	0.07	C	30.8	0.14	C	30.2	0.07	C
WB TH	33.8	0.75	C	27.7	0.58	C	38.3	0.79	D	34.8	0.70	C	38.6	0.79	D	35.3	0.70	D
WB RT	32.2	0.57	C	27.7	0.55	C	35.6	0.54	D	33.3	0.50	C	35.9	0.54	D	33.7	0.50	C
SB LT	20.0	0.17	C	10.5	0.23	B	20.9	0.18	C	12.5	0.27	B	21.2	0.18	C	12.6	0.27	B
SB TH	29.7	0.72	C	19.3	0.75	B	32.5	0.79	C	27.4	0.85	C	32.8	0.79	C	28.2	0.85	C
SB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
Overall	32.5	-	C	18.8	-	B	59.6	-	E	24.0	-	C	62.7	-	E	24.4	-	C
2: Honoapiilani Highway & Kuikahi Drive																		
NB LT	16.1	0.04	B	17.6	0.14	B	18.4	0.09	B	21.0	0.24	C	18.4	0.09	B	21.1	0.23	C
NB TH	26.8	0.78	C	27.0	0.75	C	34.7	0.85	C	41.2	0.87	D	34.7	0.85	C	41.9	0.88	D
NB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
EB LT	27.7	0.19	C	28.3	0.04	C	31.1	0.22	C	35.0	0.08	C	31.2	0.23	C	35.4	0.08	D
EB TH	33.7	0.70	C	30.3	0.40	C	43.9	0.78	D	39.2	0.66	D	43.9	0.78	D	39.7	0.66	D
EB RT	29.9	0.37	C	27.7	0.13	C	33.6	0.38	C	34.2	0.21	C	33.6	0.38	C	34.5	0.21	C
WB LT	23.6	0.65	C	23.7	0.72	C	35.0	0.79	C	41.2	0.90	D	37.0	0.81	D	44.6	0.92	D
WB TH	22.0	0.15	C	17.4	0.18	B	25.0	0.17	C	20.8	0.26	C	25.0	0.17	C	21.2	0.26	C
WB RT	17.4	0.42	B	13.4	0.28	B	20.3	0.51	C	15.8	0.42	B	21.0	0.55	C	15.9	0.43	B
SB LT	17.8	0.70	B	15.8	0.55	B	48.1	0.94	D	26.4	0.76	C	54.9	0.97	D	29.0	0.79	C
SB TH	16.4	0.60	B	21.4	0.70	C	22.5	0.75	C	30.4	0.81	C	22.5	0.75	C	29.8	0.80	C
SB RT	9.6	0.01	A	13.8	0.06	B	10.2	0.01	B	15.2	0.07	B	10.2	0.01	B	15.1	0.07	B
Overall	21.9	-	C	21.7	-	C	31.9	-	C	32.0	-	C	33.1	-	C	32.9	-	C
3. Kuikahi Dr & Kehalani Village Center Drwy & Project Access I																		
NB LT/TH	-	-	-	-	-	-	-	-	-	-	-	-	228.1	0.85	F	382.0	0.91	F
NB RT	-	-	-	-	-	-	-	-	-	-	-	-	16.4	0.09	C	13.0	0.04	B
EB LT	8.8	0.07	A	9.2	0.11	A	9.3	0.10	A	10.5	0.19	B	9.4	0.10	A	10.5	0.19	B
WB LT	-	-	-	-	-	-	-	-	-	-	-	-	9.8	0.01	A	9.0	0.03	A
SB LT	34.8	0.21	D	33.9	0.23	D	62.4	0.35	F	104.1	0.61	F	-	-	-	-	-	-
SB LT/TH		-			-			-			-		150.1	0.67	F	307.5	1.13	F*
SB RT	13.0	0.18	B	14.4	0.27	B	14.9	0.24	B	23.5	0.52	C	15.0	0.24	C	23.5	0.52	C

Table 8. Level of Service Analysis **(Continued)**

Intersection	Existing Conditions						Base Year Without Project (2021)						Future Year With Project (2021)					
	AM			PM			AM			PM			AM			PM		
	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS
4: Waiale Rd & Kuikahi Dr/Maui Lani Pkwy																		
NB LT	25.1	0.42	C	23.4	0.23	C	34.8	0.55	C	33.2	0.43	C	42.0	0.64	D	35.7	0.50	D
NB TH/RT	35.9	0.81	D	27.4	0.52	C	48.0	0.87	D	43.8	0.76	D	53.8	0.88	D	45.3	0.72	D
EB LT	23.0	0.82	C	17.8	0.65	B	45.8	0.94	D	40.7	0.87	D	54.8	0.96	D	54.1	0.92	D
EB TH/RT	18.0	0.50	B	18.3	0.45	B	27.6	0.66	C	29.7	0.61	C	28.2	0.64	C	32.5	0.61	C
WB LT	24.3	0.10	C	18.8	0.17	B	33.4	0.21	C	25.2	0.39	C	36.0	0.21	D	27.8	0.40	C
WB TH	32.2	0.73	C	27.7	0.77	C	49.5	0.86	D	46.5	0.88	D	54.9	0.87	D	54.1	0.90	D
WB RT	34.1	0.78	C	26.6	0.71	C	36.4	0.11	D	28.8	0.16	C	39.4	0.13	D	31.6	0.15	C
SB LT	25.0	0.69	C	19.9	0.62	B	48.8	0.87	D	35.8	0.82	D	64.5	0.94	E	37.2	0.81	D
SB TH/RT	36.8	0.81	D	34.7	0.87	C	38.0	0.77	D	45.4	0.90	D	43.2	0.81	D	54.4	0.93	D
Overall	28.1	-	C	25.0	-	C	41.2	-	D	39.3	-	D	47.7	-	D	45.2	-	D
5: Kamehameha Ave & Maui Lani Pkwy																		
NB LT	24.5	0.55	C	15.9	0.20	C	-	-	-	-	-	-	-	-	-	-	-	-
NB TH/RT	53.9	0.90	F	18.2	0.38	C	-	-	-	-	-	-	-	-	-	-	-	-
NB LT/TH/RT	-	-	-	-	-	-	28.3	0.83	D	15.2	0.54	C	28.9	0.84	D	15.2	0.54	C
EB LT/TH/RT	82.3	1.03	F*	109.2	1.11	F*	16.8	0.69	C	25.0	0.83	C	17.1	0.69	C	25.6	0.84	D
WB LT/TH/RT	57.4	0.93	F	76.9	1.05	F*	20.3	0.67	C	23.6	0.77	C	21.1	0.69	C	24.2	0.78	C
SB LT	23.0	0.52	C	19.1	0.44	C	-	-	-	-	-	-	-	-	-	-	-	-
SB TH/RT	88.0	1.06	F*	51.9	0.93	F	-	-	-	-	-	-	-	-	-	-	-	-
SB LT/TH/RT	-	-	-	-	-	-	36.3	0.91	E	27.1	0.85	D	37.3	0.91	E	28.4	0.86	D
6: Waiale Rd & Kaupo St																		
NB LT	8.8	0.03	A	9.3	0.05	A	9.3	0.04	A	10.0	0.06	A	9.4	0.04	A	10.2	0.07	B
EB LT	110.5	0.85	F	46.3	0.27	E	285.3	1.29	F*	93.0	0.46	F	340.0	1.41	F*	109.2	0.51	F
EB RT	12.9	0.10	B	13.9	0.08	B	14.7	0.13	B	16.4	0.11	C	14.9	0.13	B	17.1	0.11	C
7: Waiale Rd & Olomea St																		
NB LT	9.5	0.04	A	9.9	0.04	A	10.1	0.05	B	10.7	0.05	B	10.2	0.05	B	10.9	0.05	B
EB LT	513.5	1.86	F*	190.8	1.09	F*	1026.8	2.92	F*	556.8	1.87	F*	1141.4	3.15	F*	658.2	2.08	F*
EB RT	14.0	0.08	B	14.9	0.05	B	16.0	0.11	C	17.5	0.07	C	16.3	0.11	C	18.3	0.07	C

Table 8. Level of Service Analysis **(Continued)**

Intersection	Existing Conditions						Base Year Without Project (2021)						Future Year With Project (2021)					
	AM			PM			AM			PM			AM			PM		
	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS	Delay (Seconds)	Volume/ Capacity Ratio	LOS
9: Waiale Rd & Kaohu St/Oluloa Dr																		
NB LT/TH	61.4	0.99	F	27.9	0.79	D	123.9	1.21	F*	78.5	1.08	F*	139.6	1.25	F*	92.7	1.11	F*
NB RT	8.6	0.01	A	8.2	0.03	A	9.4	0.02	A	8.9	0.04	A	9.5	0.02	A	9.1	0.04	A
EB LT	13.3	0.21	B	11.1	0.06	B	14.4	0.23	B	11.9	0.06	B	14.5	0.24	B	12.0	0.07	B
EB TH/RT	13.5	0.33	B	12.7	0.33	B	17.8	0.52	C	17.2	0.52	C	18.6	0.55	C	18.8	0.58	C
WB LT	24.0	0.13	C	22.3	0.05	C	30.8	0.19	D	30.0	0.07	D	32.1	0.20	D	31.6	0.07	D
WB TH/RT	12.3	0.05	B	10.7	0.00	B	15.0	0.17	B	12.9	0.04	B	15.2	0.17	C	13.2	0.04	B
SB LT/TH/RT	75.7	1.04	F*	46.4	0.93	E	134.7	1.24	F*	95.7	1.11	F*	138.6	1.27	F*	107.4	1.15	F*
10: Honoapiilani Hwy & W Waiko Rd/E Waiko Rd																		
NB LT	10.4	0.01	B	10.9	0.02	B	12.3	0.02	B	14.3	0.02	B	12.5	0.02	B	14.4	0.02	B
NB TH/RT	20.2	0.72	C	21.8	0.83	C	41.7	0.97	D	34.9	0.93	C	43.2	0.97	D	36.5	0.94	D
EB LT/TH	28.2	0.12	C	24.4	0.06	C	28.2	0.15	C	37.0	0.10	D	28.2	0.15	C	37.2	0.10	D
EB RT	27.6	0.03	C	24.2	0.03	C	27.5	0.03	C	36.6	0.03	D	27.4	0.03	C	36.8	0.03	D
WB LT/TH/RT	30.1	0.34	C	26.4	0.34	C	32.0	0.51	C	48.3	0.77	D	32.2	0.52	C	48.8	0.77	D
SB LT	11.3	0.33	B	12.6	0.16	B	19.6	0.66	B	24.3	0.31	C	19.8	0.67	B	25.3	0.32	C
SB TH	12.5	0.60	B	13.8	0.69	B	16.9	0.76	B	17.5	0.78	B	17.3	0.77	B	17.7	0.78	B
SB RT	6.4	0.01	A	7.1	0.04	A	6.6	0.01	A	6.9	0.03	A	6.6	0.01	A	6.9	0.03	A
Overall	17.2	-	B	18.3	-	B	28.8	-	C	28.6	-	C	29.6	-	C	29.5	-	C
11: E Waiko Rd & Waiale Rd																		
EB LT	7.6	0.04	A	7.8	0.05	A	7.8	0.06	A	8.5	0.09	A	7.8	0.06	A	8.6	0.10	A
SB LT/RT	14.2	0.40	B	12.1	0.25	B	37.0	0.82	E	24.0	0.61	C	42.9	0.87	E	28.4	0.68	D
12: Waiale Rd & Ohana Hana Loop																		
NB LT	7.7	0.01	A	7.6	0.01	A	8.1	0.01	A	7.9	0.02	A	8.1	0.01	A	7.9	0.02	A
EB LT	10.9	0.03	B	11.1	0.03	B	13.2	0.05	B	14.3	0.04	B	13.2	0.05	B	14.3	0.04	B
EB RT	9.6	0.03	A	9.1	0.01	A	10.7	0.04	B	9.9	0.01	A	10.7	0.04	B	9.9	0.01	A
13: Waiale Rd & Nokekula Lp																		
NB LT	7.7	0.00	A	7.6	0.02	A	8.1	0.01	A	7.9	0.02	A	8.1	0.01	A	8.0	0.02	A
EB LT/RT	10.4	0.07	B	10.0	0.03	B	12.2	0.09	B	11.7	0.05	B	12.5	0.09	B	12.0	0.05	B
14: Waiale Rd & Haawi St																		
NB LT	7.6	0.01	A	7.7	0.03	A	8.0	0.01	A	8.1	0.04	A	8.0	0.01	A	8.1	0.04	A
EB LT/RT	11.0	0.22	B	11.0	0.14	B	13.6	0.29	B	13.9	0.20	B	14.1	0.30	B	14.4	0.20	B
15: Waiale Rd & Kokololio St																		
NB LT	7.6	0.00	A	7.9	0.01	A	8.0	0.00	A	8.2	0.01	A	8.0	0.01	A	8.2	0.01	A
EB LT	12.2	0.18	B	12.2	0.11	B	15.7	0.24	C	16.6	0.17	C	16.2	0.25	C	17.2	0.18	C
EB RT	9.2	0.03	A	9.6	0.01	A	10.2	0.04	B	10.4	0.02	B	10.4	0.04	B	10.5	0.02	B
16: Waiale Rd & Project Access II																		
NB LT		-			-			-			-		8.0	0.01	A	8.4	0.02	A
EB LT/RT	-	-	-	-	-	-	-	-	-	-	-	-	14.1	0.13	B	15.2	0.08	C

Source: Austin, Tsutsumi & Associates (2017)

Honoapiʻilani Highway/Kehalani Parkway: As noted previously, the queueing conditions at this intersection is due to the school traffic from Puʻu Kukui Elementary School. The proposed project is forecast to increase traffic at this intersection by 1.3 percent with individual movement increases of 1 to 15 vehicles. There are no improvements proposed for this intersection.

Kuʻikahi Drive/Kehalani Village Center Driveway: The southbound left-turn movement at the Kehalani Village Center Driveway will continue to operate at LOS F during AM and PM peak hours of traffic. With the addition of the project's access driveway, the northbound left-turn movement will also operate at LOS F. A traffic signal is not anticipated to be warranted in 2021.

Kamehameha Avenue/Maui Lani Parkway Roundabout: The southbound Kamehameha Avenue approach will continue to operate at LOS E during the AM peak hour of traffic.

Waiʻale Road/Waiinu Road: As noted previously, no improvements are planned at this intersection. Traffic is expected to continue to operate at LOS F and over capacity conditions during AM and PM peak hours of traffic.

The STIP identifies a traffic signal at this intersection. For future planning purposes, exclusive left storage lanes and/or median refuge lanes along Waiʻale Road could be considered to help mitigate the Waiʻale Road northbound AM traffic flow.

Waiʻale Road/Kaupo Street: As noted previously, no improvements are planned and this intersection is expected to operate at LOS E/F and over capacity conditions.

Waiʻale Road/Olomea Street: As noted previously, although a traffic signal is warranted, there are no improvements planned and this intersection is expected to operate at LOS E/F and over capacity conditions.

Waiʻale Road/Kaohu Street: As noted previously, no improvements are planned and this intersection is expected to operate at LOS E/F and over capacity conditions. A traffic signal may be warranted, however, right-of-way constraints may make it difficult to implement.

Waiʻale Road/Kuʻikahi Drive: The project will increase traffic at this intersection by approximately 2.6 percent. Although the project can potentially increase the eastbound left-turn movement by 22 vehicles in the AM peak hour of traffic, the second access on Waiʻale Road can help to reduce impacts to the eastbound left-turn movement by shifting more exiting project traffic onto Waiʻale Road, so as not to impact the existing lines on Kuʻikahi Drive. The TIAR recommended the signal

timing plan be optimized to accommodate the increase in turning movement traffic from the project and various nearby developments. However, optimizing the signal will not mitigate the regional northbound lines along Waiʻale Road during the AM peak hour of traffic.

At the project access driveway on Kuʻikahi Drive the following improvements are proposed: Refer to **Figure 13**.

- New northbound leg with a shared left-turn/through lane and exclusive right-turn lane
- Restripe the southbound leg to provide a shared left-turn/through lane and exclusive right-turn lane
- New westbound left-turn lane to provide approximately 100 feet of storage. Based on American Association of State Highway and Transportation (AASHTO) guidance, 50 feet of storage is the required minimum, so 100 feet of storage should be sufficient to accommodate forecast westbound left-turn lines.

A right-in, right-out access is an option for the project's Kuʻikahi Drive access, but was determined in the TIAR to be not necessary given that both the southbound left-turn movement at the Kuʻikahi Drive/Kehalani Village Center Driveway intersection and the northbound left-turn lane at the project driveway/Kuʻikahi Drive intersection provide alternative pathways to the respective left-turning movement destinations. For those vehicles making the northbound left-turn movements from the Kehalani Village Center Driveway, Waimaluhia Lane allows for an alternative pathway to Kuʻikahi Drive and points east and south, via the signalized intersection at Waiʻale Road and Kuʻikahi Drive. Vehicles may also exit via Kamole Street (the north entrance to the Kehalani Village Center) to get to destinations to the north. Similarly, for those left-turning vehicles exiting the project site onto Kuʻikahi Drive, the project's Waiʻale Road driveway provides an alternative path to the west, via the Waiʻale Road/Kuʻikahi Drive signalized intersection and an alternative path to the south, via Waiʻale Road, Waiko Road, and either Kuihelani Highway or Honoapiʻilani Highway.

At the project access driveway on Waiʻale Road the following improvements are proposed: Refer to **Figure 13**.

- New northbound left-turn lane to provide approximately 100 feet of storage in excess of AASHTO's guidance of a minimum of 50 feet of storage.

Based on Manual on Uniform Traffic Control Devices (MUTCD) signal warrants, a traffic signal will likely not be met at both driveway accesses.

According to the TIAR, the following improvements are recommended:

- Construct bike lanes along the project frontages on Ku'ikahi Drive and Wai'ale Road. Refer to **Figure 14**.
- Provide grassed shoulders and a paved walkway along the project frontages on Ku'ikahi Drive and Wai'ale Road. Refer to **Figure 14**.

Wai'ale Road/Ku'ikahi Drive:

- Optimize the Wai'aleRoad/Ku'ikahi Drive signalized intersection signal timing after completion and occupancy of the Wailuku Apartment Rental Housing Project

Ku'ikahi Drive/Project Access:

- Provide a new northbound leg with a shared left-turn/through lane and exclusive right-turn lane
- Restripe the southbound leg to provide a shared left-turn/through lane and exclusive right-turn lane
- Provide a new westbound left-turn lane to provide approximately 100 feet of storage

Wai'ale Road/Project Access:

- Provide a new northbound left-turn lane to provide approximately 100 feet of storage

In response to community concerns and in coordination with the DPW, a mid-block pedestrian crossing with three (3) pedestrian crossing signs with warning flashers and curbed pedestrian refuge island is proposed to create a safer pedestrian condition to and from the project to the Kehalani Village Center. The DPW will require a speed study to be done to make sure the pedestrian signals are required based on need and site requirements. Refer to **Figure 13**.

Implementation of the recommended roadway improvements is expected to minimize impacts on traffic from the proposed project.

2. Water

a. Existing Conditions

A Preliminary Engineering Report (PER) was prepared by Warren S. Unemori Engineering, Inc. for the proposed project. Refer to **Appendix**

"B". The proposed Wailuku Apartment Rental Housing Project's domestic water and fire flow will be supplied by the County of Maui, Department of Water Supply (DWS) from its Central Maui System. Water source for the project includes groundwater wells within the ʻĪao aquifer and treated surface water from ʻĪao Stream. The storage reservoir that will service the project site will be supplied by the existing three (3) million gallon ʻĪao tank, located mauka (west) of the project at an elevation of 506 feet. This storage tank exceeds the minimum 240,000 gallons required for the project's fire protection and will provide ample pressure to the project site.

According to the DWS, the County's water distribution system nearest to the project site consists of an existing 8-inch waterline within Kuʻikahi Drive and an 18-inch diameter waterline adjacent to the east property line. The nearest fire hydrant is located within 150 feet at the corner of Waiʻale Road and Kuʻikahi Drive. There is no water meter on the property. The project will be subject to the County's Availability Policy as codified in Title 14, Maui County Code (MCC). See **Figure 15**.

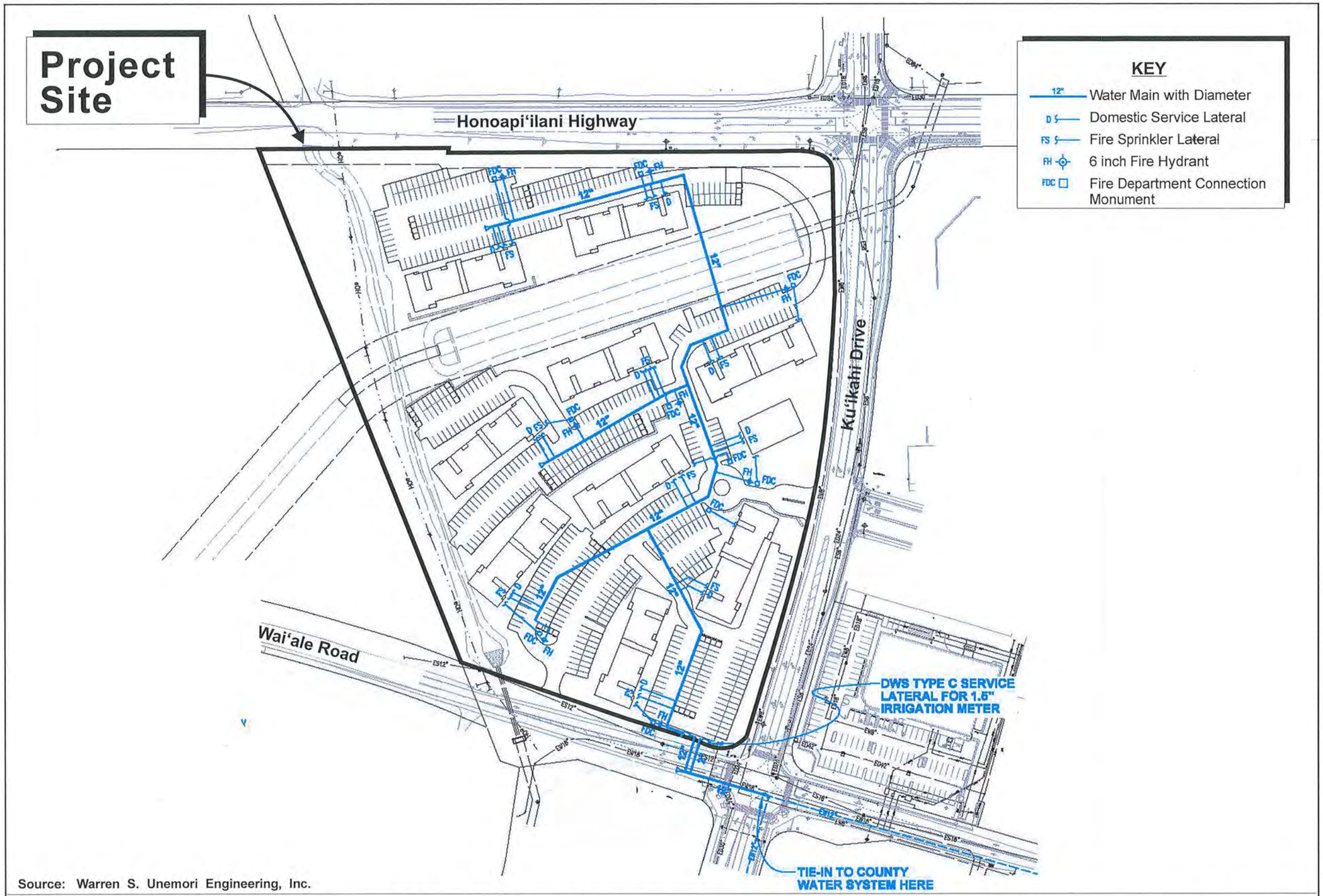
According to the PER, in addition to the 18-inch diameter waterline within Waiʻale Road there is an existing 12-inch diameter waterline fronting the Kehalani Village Center within Waiʻale Road. The project will connect to this 12-inch waterline. Refer to **Figure 15**.

b. <u>Potential Impacts and Mitigation Measures</u>

The proposed project proposes to connect to an existing County waterline pursuant to DWS' standards to meet the project's fire flow and domestic water demand and will be served by the DWS Central Maui System. Domestic water demand, as determined by the Domestic Consumption Guidelines set forth by the DWS for the project, is anticipated to be approximately 189,000 gallons per day (gpd).

The proposed project will install approximately 200 lineal feet of 12-inch waterline to connect to the existing 12-inch diameter waterline within Waiʻale Road for fire protection and domestic water. Refer to **Figure 15**. The installation of the 12-inch waterline for the project will meet the DWS' fire flow standards of 2,000 gallons per minute (gpm) for a 2-hour duration.

According to the DWS the project site is located within the two-year time of travel wellhead protection area. As such, the project area is located in an area more sensitive to pollutants that could enter the ʻĪao aquifer and migrate to the well intake area. The DWS recommends implementation of Best Management Practices (BMPs) to protect groundwater resources. DWS recommends including parking with permeable surfaces, reducing



Source: Warren S. Unemori Engineering, Inc.

Figure 15

Wailuku Apartment Rental Housing Project
Water Improvements Map

NOT TO SCALE

Prepared for: Legacy Wailuku LLC

MUNEKIYO HIRAGA

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runoff and improving aquifer recharge. The DWS recommends the following BMPs to protect the aquifer:

- Sweep parking lots and other paved areas periodically to remove debris. Dispose of debris in the garbage.
- Post signs to prevent litter and auto maintenance activities, such as changing fluids or washing cars, which should not be allowed on the property.
- Wash water from all cleaning operations must be disposed into the sanitary sewer.
- Keep dumpster areas free of litter and lids closed.
- Avoid mixing or using pesticides, fertilizers, herbicides, degreasers, fuels or other pollutants onsite.

DWS also recommends the following additional BMPs:

Construction BMPS

- Prevent cement products, oil, fuel and other toxic substances from falling onto the ground, as they can leach into the watertable. Remove all construction debris and toxic substances daily.
- Maintain vehicles and equipment to prevent oil or other fluids from leaking. Concrete trucks and tools used for construction should be rinsed offsite.
- Properly install and maintain erosion control barriers, such as silt fencing or straw bales.
- Disturb the smallest area possible.
- Keep runoff onsite.
- Use reclaimed water as an alternative source of non-potable water for dust control during construction. The Wailuku-Kahului Wastewater Treatment Plant provides reclaimed water at a reasonable cost.
- Properly and promptly dispose of all loosened and excavated soil and debris material.

Indoor Conservation BMPs

- Use Environmental Protection Agency (EPA) Water Sense labeled plumbing fixtures.
- Install flow reducers and faucet aerators in all plumbing fixtures, wherever possible.
- Install dual flush toilets with high efficiency models that use 1.28 gallons per flush or less.
- Install showerheads with a flow rate of 1.5 gallons per minute (gpm) at 60 pounds per square inch (psi).
- Install bathroom sink fixtures that do not exceed one (1) gpm at 60 psi.

Outdoor Conservation BMPs

- Retain groundcover until the last possible date. Stabilize denuded areas by sodding or planting as soon as possible. Use high seeding rates to ensure rapid stand establishment.
- Limit turf to as small an area as possible.
- After plants are established, avoid fertilizing to stimulate growth.
- Use Smart Approved WaterMark irrigation products. Examples include evapotranspiration irrigation controllers and drip irrigation.

As applicable, the project will institute recommended BMPs from the DWS. The project is not anticipated to adversely impact groundwater resources.

3. Wastewater

a. Existing Conditions

There is an existing 12-inch diameter gravity sewerline within Wai'ale Road which conveys wastewater collected from the project area to the Wailuku-Kahului Wastewater Reclamation Facility in Kahului adjacent to Kanahā Wildlife Refuge and operated by the DEM. There is no existing sewer connection to the project site.

In their comment letter dated April 17, 2018, the DEM cautioned that, although wastewater system capacity is currently available, the developer

should be informed that wastewater system capacity cannot be ensured until the issuance of building permits and a sewer impact study should be provided to substantiate that the existing wastewater system is adequate to serve the project. The DEM further noted that, *"Developer is not required to pay assessment fees for this area at the current time".*

b. Potential Impacts and Mitigation Measures

The PER calculated wastewater generated by the project as approximately 83,000 gpd, as shown in **Table 9**.

Table 9. Average Daily Sewer Demand Calculations

Use	Base Unit	Contribution Rate	Average Daily Sewer Demand
Multi-Family	324 Units	255 gal/unit/day	82,620 gpd
Office/Recreation Building	2 Employees	20 gal/capita/day	40 gpd
		Total	82,660 gpd
Source: Warren S. Unemori Engineering, Inc.			

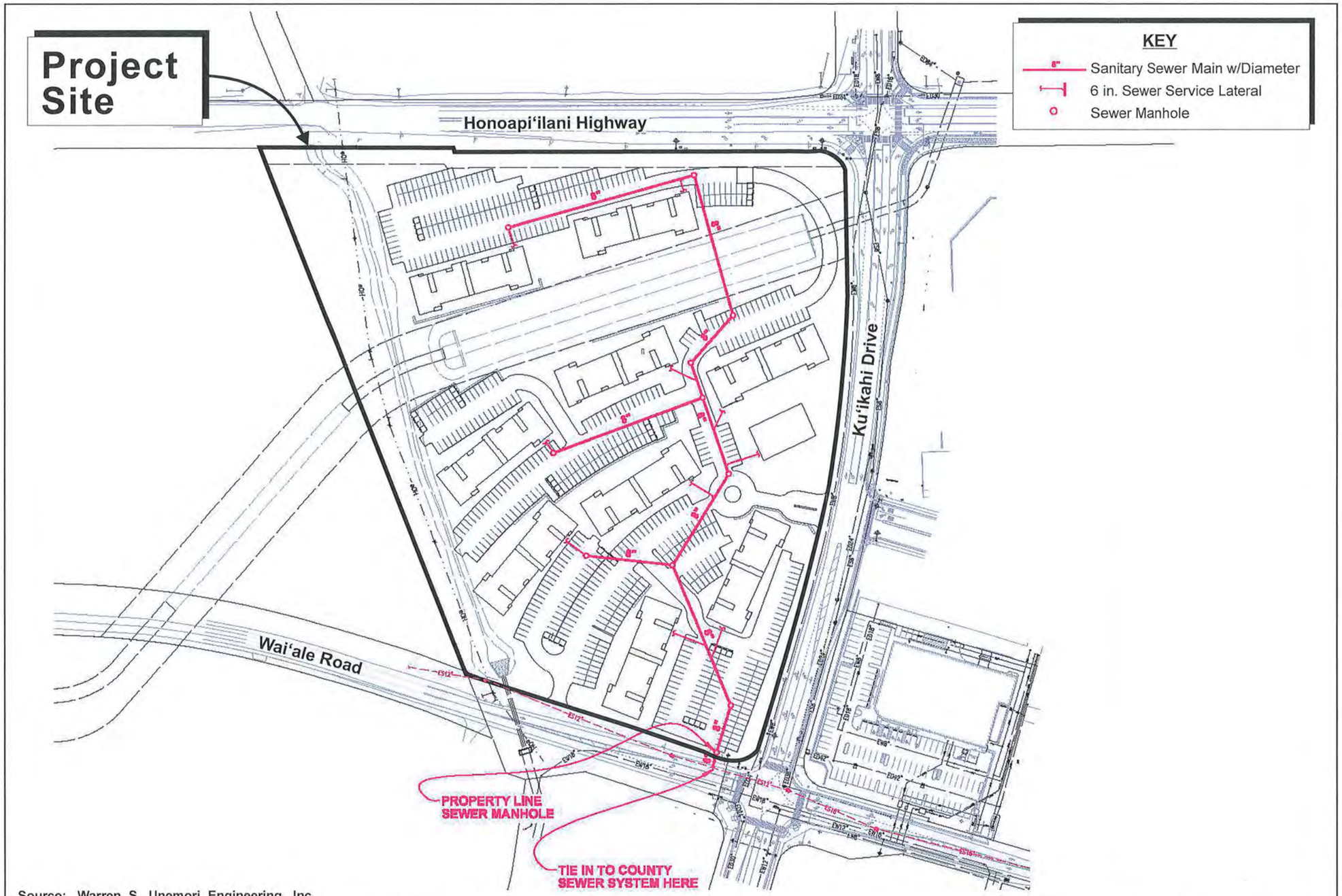
As noted in the PER, wastewater generated by the project will be conveyed by an onsite 8-inch diameter gravity sewer service lateral connection to the existing County 12-inch diameter gravity sewerline located within Wai'ale Road. An 8-inch diameter sewerline extension will be constructed from the existing County sewer main under Wai'ale Road to connect the site to the County sewer system and conveyed to the Wailuku-Kahului Wastewater Reclamation Facility. See **Figure 16**. Refer to **Appendix "B"**.

The project shall comply with health and safety regulatory requirements of the DEM at the time of building permit application. The Applicant and project engineer will continue to work with DEM as the project progresses such that the project can be served by the County of Maui's (COM) system and will not adversely affect the COM wastewater collection, transmission, and treatment infrastructure.

4. Drainage System

a. Existing Conditions

The project site is mainly vacant and was formerly used for sugar cane cultivation until Wailuku Sugar Company ceased its operation in the early 1980s. A small portion of the subject property is currently used for



Source: Warren S. Unemori Engineering, Inc.

Figure 16

Wailuku Apartment Rental Housing Project
Wastewater Improvements Map

NOT TO SCALE

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temporary trailer offices. The existing terrain slopes downward from the southwest to northwest across the project site at an approximately 5 percent slope. Elevations across the project site range from approximately 360 feet above mean sea level at its southwest corner, to approximately 306 feet at its northeast corner.

According to the project's PER, three (3) distinct drainage systems pass through the project site:

1. A natural drainageway (gully), which conveys storm runoff from lands mauka of Honoapi'ilani Highway to the normally dry overflow drainage basin at Wai'ale Reservoir. This natural drainageway conveys a 100 year stormflow of approximately 1,700 cubic feet per second (cfs) across the project site in a mauka-makai (west to east) direction near its southern boundary. See **Figure 17**.

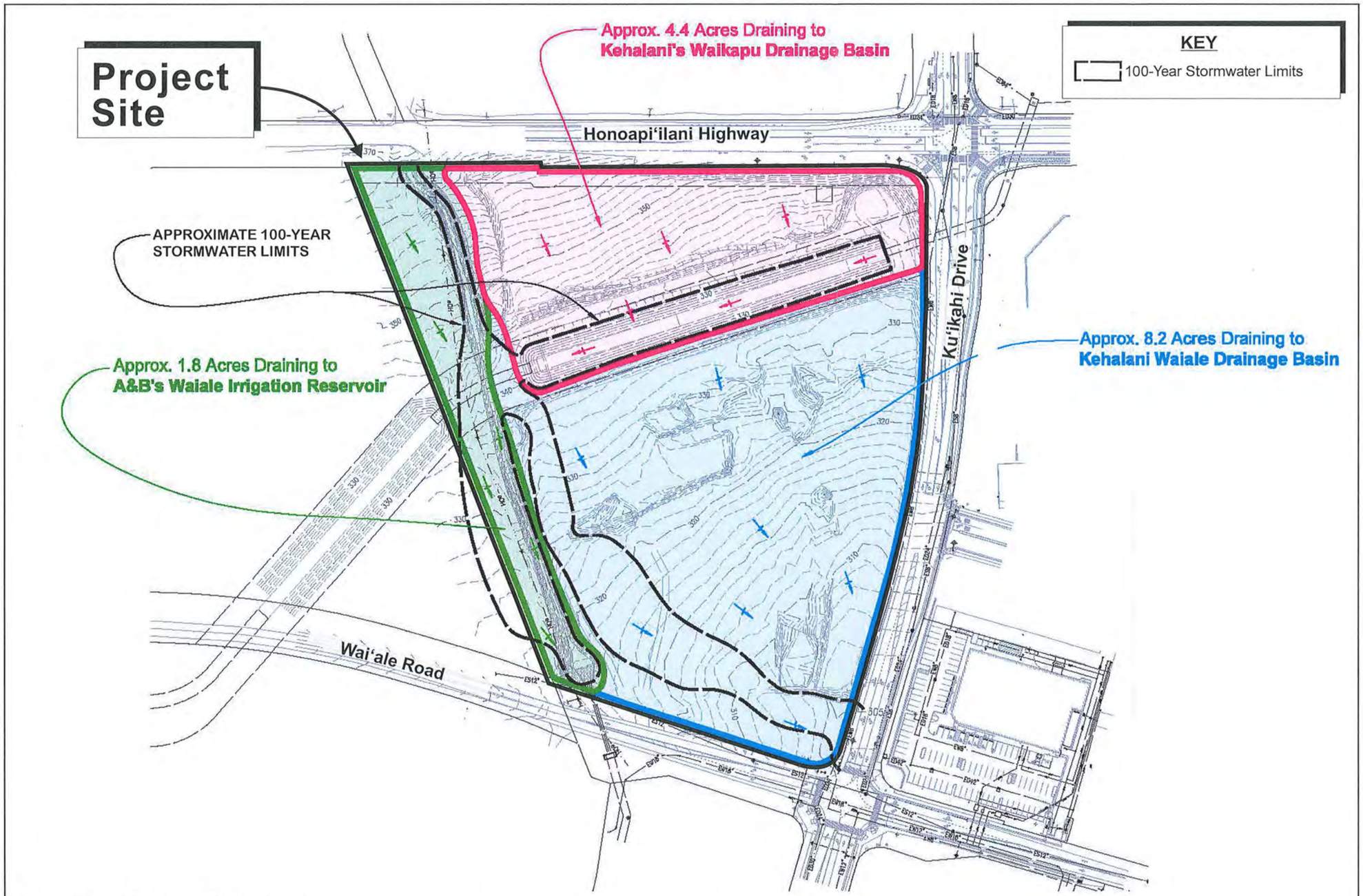
2. A man-made drainageway traverses the project site which conveys storm runoff from the residential developments in the mauka portion of the Kehalani Master Planned Community to a large drainage retention basin in Waikapū across Wai'ale Road and the Waikapū Gardens Subdivision. This drainageway is designed to convey a 100-year storm flow of approximately 2,200 cfs (refer to **Figure 17**).

3. An underground storm drainage system which conveys runoff from the makai portion of the Kehalani Master Planned Community to Kehalani's Wai'ale Drainage Basin located at the corner of Olomea Street and Wai'ale Road. This basin drains into Wailuku River through a 1.2 mile drainline in Wai'ale Road located downstream of the basin. Refer to **Figure 17**.

According to the PER, the undeveloped 14.4-acre project site generates storm runoff at a 10-year peak flow rate of approximately 15 cfs. The PER also noted that the existing natural drainageway and man-made drainageway are located within the potential 100-year stormwater limits.

b. <u>Potential Impacts and Mitigation Measures</u>

The PER estimates that the post-development onsite 10-year peak storm flow from the project site will be approximately 34 cfs, an increase of approximately 19 cfs over the existing, undeveloped condition. According to the PER, the design of Kehalani's Wai'ale Drainage Basin can accommodate the increase in runoff from the project site. As such, the project's drainage system will consist of drainage inlets and underground pipes installed throughout the development to collect runoff and convey the



Source: Warren S. Unemori Engineering, Inc.

Figure 17

Wailuku Apartment Rental Housing Project
Existing Drainage Area Map

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runoff to the northeast corner of the site where it will be discharged into the pre-designated connection point at the storm drain mainline on Kuʻikahi Drive, and in turn, conveyed to Kehalani's Waiʻale Drainage Basin which was constructed to accommodate the post-development runoff from the project site.

Stormwater flows to the Waikapū Drainage Basin and Waiʻale Drainage Basin is expected to either decrease or remain unchanged. See **Figure 18**.

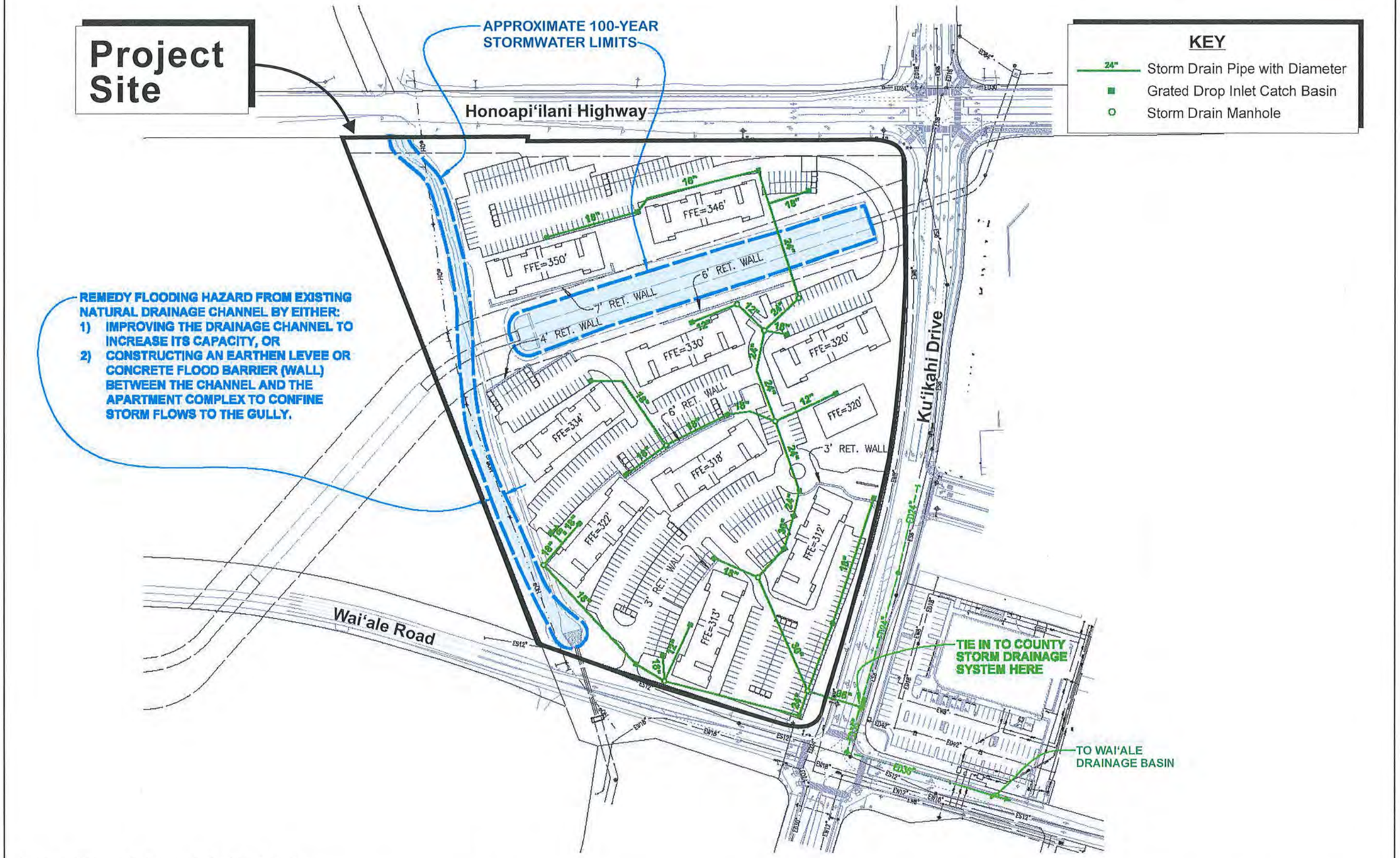
The PER noted that the potential flooding hazard from the under-sized natural drainageway will be mitigated either by (1) improving the drainageway to increase its capacity or (2) constructing an earthen levee or concrete flood barrier (wall) between the drainageway and apartment complex to confine stormflows to the gully.

In accordance with stormwater treatment required by the COM, stormwater within the Waikapū and Waiʻale Drainage Basins will receive "detention based" treatment by being retained for at least 48 hours to allow sediments to settle. Runoff conveyed to the Waiʻale basin will receive "flow through" treatment by passing through a hydrodynamic separator installed on the project site before entering the storm drainage system at Kuʻikahi Drive.

The drainage improvements will be in accordance with Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui. Development of the proposed project will also include the implementation of site specific BMPs during construction to provide erosion control and minimize impacts to downstream and surrounding properties.

BMPs proposed will include dust control consisting of a dust fence along the property boundaries and exposed areas will be thoroughly watered by sprinklers and water trucks on a daily basis. Also, sediment ponds will be installed to capture a majority of the project site's stormwater runoff and prevent sediment laden runoff from entering the existing open drainageways or underground storm drainage system. Residual runoff will be treated by installing silt fencing along the outer boundary of the construction site and filters on nearby drain inlets. The site's construction entrance/exit will also be outfitted with tire cleaning pad to prevent sediment from being tracked onto the roadways by construction vehicles and equipment.

The State Department of Health (DOH), Clean Water Branch commented that the project must meet the water quality requirements of Hawaiʻi



Source: Warren S. Unemori Engineering, Inc.

Figure 18

Wailuku Apartment Rental Housing Project
Drainage Improvements Map

NOT TO SCALE

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Administrative Rules (HAR), Chapters 11-54 and 11-55. A National Pollutant Discharge Elimination System (NPDES) permit may be required for discharges of wastewater, including stormwater runoff, into State surface waters. DOH also recommended that the project reduce, reuse and recycle to protect, restore and sustain water quality and beneficial uses of State waters. As may be appropriate, the Applicant will implement the recommendations of the DOH.

The State Department of Transportation Airports Division noted the project site is located approximately four (4) miles from Runway 2 of the Kahului Airport. As such, the SDOT cautioned standing water in the existing open drainage channel shall be eliminated and water must be drained or pumped out within 48 hours of peak weather events to eliminate potential hazardous wildlife attractions that may impact aircraft operations at Kahului Airport. Stormwater from the open channel drains into a retention basin in Waikapū and is not expected to remain in the channel. However, any standing water that may remain in the channel is expected to dissipate within 48-hours. As such, the open drainage channel is not expected to attract hazardous wildlife which may affect flight operations at the Kahului Airport.

Adverse impacts on downstream and surrounding properties and water quality are not anticipated with compliance with regulatory requirements and implementation of the proposed drainage improvements for the project.

5. Electric, Telephone, and Cable

a. Existing Conditions

There are existing overhead electrical, telephone, and cable transmission lines along Honoapi'ilani Highway and Wai'ale Road, which are adjacent to the project site. There are also overhead utility lines along the southern property boundary along the existing gully.

b. Potential Impacts and Mitigation Measures

Maui Electric Company, Ltd., Hawaiian Telcom, and Spectrum Cable (formerly Oceanic Time Warner) will be able to provide electrical, telephone, and cable television services, respectively, for the proposed project. The proposed electrical, telephone, and cable TV distribution systems to the project site will be serviced from the existing facilities along Wai'ale Road. An existing utility pole near the Wai'ale Road driveway entrance will need to be relocated to accommodate widening of the

roadway pavement for the bike lane. Within the project, underground utility lines will provide electrical, telephone, and cable television services.

The project driveway entrances on Ku'ikahi Drive and Wai'ale Road will be safely illuminated using private, pole-mounted light fixtures conforming to both Maui County's Street Lighting Ordinance and DPW's lighting requirements.

E. CUMULATIVE AND SECONDARY IMPACTS

Pursuant to the Hawai'i Administrative Rules, Chapter 200, Section 11-200-2, entitled Environmental Impact Statement Rules, a cumulative impact means:

> *...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumuative impacts can result from individually minor but collectively significant actions taking place over a period of time.*

"Secondary impacts" or "indirect impacts" are defined by Title 11, Chapter 200, HAR as:

> *...effects that are caused by the action or are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems including ecosystems.*

Cumulative and secondary impacts 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 one (1) of the impediments to growth.

The context for analyzing cumulative or secondary impacts is defined by the time horizon within which "reasonably foreseeable" conditions may occur. From a local planning standpoint, the future context for development is established by the Maui County General Plan. The General Plan defines the parameters for growth and was updated in 2012.

The assessment of cumulative and secondary impacts is undertaken in the context of planned growth recommended by the General Plan Update process, particularly the Maui Island Plan (MIP) directed growth boundaries and regional community plans. Future housing and commercial development envisioned in the area represents the "reasonably foreseeable" future in considering potential impacts of the proposed project.

As will be discussed in Chapter III, the proposed project is located in the Urban Growth Boundary of the MIP and is identified as a Future Growth Area on the Wailuku-Kahului

Community Plan. In this context the project is consistent with the growth and type of development that is envisioned for this area.

A key element in understanding the requirement for assessing cumulative and secondary impacts, therefore, is the need to recognize what constitutes "reasonably foreseeable actions". Projects having relevance in this regard are those with land use entitlements in the surrounding area which include the Kehalani Master Planned Community, Maui Lani Master Planned Community, the Wai'ale Affordable Housing project, and Waiko Road industrial subdivisions in Waikapū. The planned A&B Wai'ale Project and Waikapū Country Town are undergoing land entitlements and are anticipated to occur after the Wailuku Apartment Rental Housing Project while the Pu'unani Subdivision has since been withdrawn and it is unclear whether this project will continue.

The cumulative impacts of the proposed project, together with other reasonably foreseeable actions, will include increased infrastructural demands. Improvements to roadways, drainage, wastewater, and water will be implemented with the project to minimize its cumulative effect of such increased demands. The project has been evaluated with respect to potential impacts and proposed infrastructure systems for the project in the context of future projected regional growth.

RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

III

III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

This section discusses the relationship between the proposed Wailuku Apartment Rental Housing Project and State and County land use plans, policies, and controls for the Central Maui region.

A. STATE LAND USE DISTRICTS

Pursuant to Chapter 205, Hawai'i Revised Statutes (HRS), all lands in the State have been placed into one (1) of four (4) major land use districts by the State Land Use Commission. These land use districts are designated "Urban", "Rural", "Agricultural", and "Conservation". The project site is located within the "Agricultural" district. See **Figure 19**. The proposed action involves a request for a District Boundary Amendment (DBA) from "Agricultural" district to the "Urban" district. Since the proposed project site is an approximately 14.416-acre parcel, the Maui County Council will be the approving body for the DBA.

B. LAND USE COMMISSION RULES, CHAPTER 15-15, HAWAI'I ADMINISTRATIVE RULES

The reclassification of the subject property is in conformance with the following standards of the "Urban" district set forth in Chapter 15-15(18), Hawai'i Administrative Rules:

Chapter 15-15(18)

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

Discussion and Response:

The proposed project is located in close proximity to the Waikapu Gardens, a 411-unit affordable housing subdivision. Immediately west (mauka) of the project site are existing Kehalani and Wailuku Heights residential subdivisions. Also, the north boundary of the project is the Kehalani Commercial Town Center and at the east of the project is the Maui Lani Commercial Center. The project site is within the Wailuku Urban Growth Boundary (UGB) of the Maui Island Plan (MIP) with a dominant pattern of urban settlement and services in the immediate area. It sits next to the two (2) major master planned communities in Central Maui, Maui Lani and Kehalani, with another one planned at Waikapū.

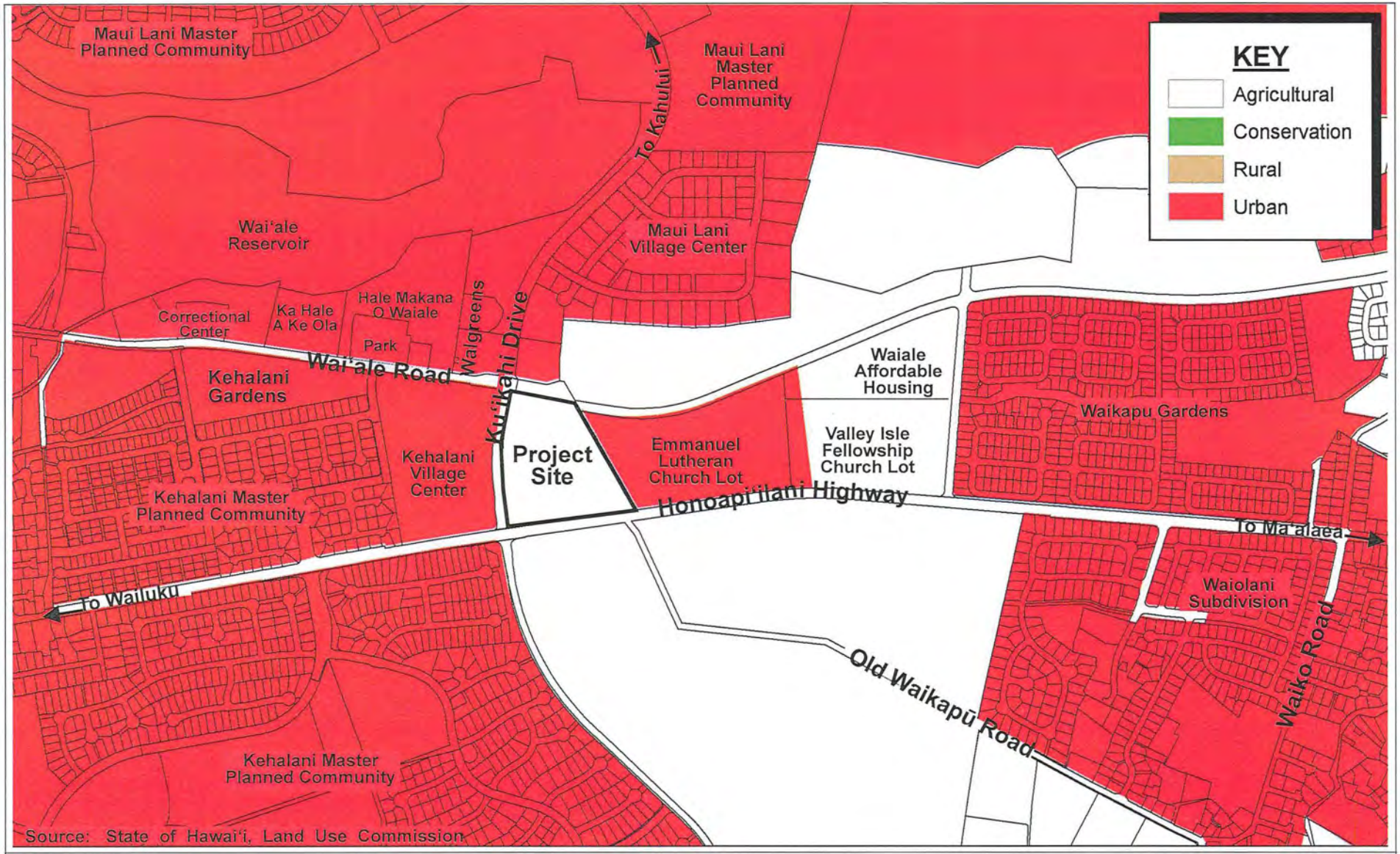


Figure 19 Wailuku Apartment Rental Housing Project

State Land Use Districts Map

0 250 500 1,000 Feet

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- *It shall take into consideration the following specific factors:*

  a. *Proximity to centers of trading and employment except where development would generate new centers of trading and employment.*

  b. *Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection.*

Discussion and Response:

The project site is bounded by Kehalani Village Center, a shopping center to the north, and Maui Lani Commercial Complex to the east. To the west of the project site is Kehalani residential subdivision. It is located less than a mile from Wailuku Town which is the County seat of government and a center of trading and employment. Also, the project site is located approximately two (2) miles from Kahului Town which is a major center of commercial activities, employment, and a major harbor, and air transportation activities. Immediately west of the project site is the State of Hawai'i's Honoapi'ilani Highway which serves as a major transportation route.

Basic infrastructural services, such as transportation systems, water and sewer services are available in close proximity to the project site. Both public and private schools and public parks are in very close proximity of the project site. Drainage improvements will comply with County of Maui standards. Police, fire, and medical services also presently serve the project area and they are located in very close proximity to the project site.

- *It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil condition, and other adverse environmental effects.*

Discussion and Response:

Elevations across the project site range from approximately 360 feet above mean sea level (AMSL) at its southwest corner, to roughly 306 feet AMSL at its northeast corner. The subject site has an average slope of approximately 5 percent across the project area. Drainage improvements will be constructed in accordance to County standards.

The project site is located in Flood Zone "X" which represents areas outside of the 0.2 percent annual chance flood plain. A site specific drainage review of the property indicated the existing natural drainageway (gully) and the man-made drainage channel crossing the project site are within potential 100-year stormflow limits. The potential flooding hazard from the under-sized natural drainageway will be mitigated either by (1) improving the drainageway to increase its capacity, or

(2) constructing an earthen levee or concrete flood barrier to confine stormwater to the gully. Refer to **Appendix "B"**. The project site is not subject to tsunami inundation and unstable soil conditions.

- Land contiguous with existing urban areas shall be given more consideration than noncontiguous land, and particularly when indicated for future urban use on state or county general plans.

Discussion and Response:

Lands pertaining to the subject project are adjacent to areas already in the "Urban" district, including the master planned communities of Maui Lani and Kehalani. The project site is also located within the UGB of the Maui Island Plan.

- *It shall include lands in appropriate locations for new urban concentration to areas of urban growth as shown on the state and county general plans.*

Discussion and Response:

The subject property is an appropriate location for an "Urban" district classification as it is immediately adjacent to developed lands already in the urban district classification. More importantly, the project site is within the UGB of the MIP, and designated as growth reserve within the Kahului-Wailuku Community Plan Map. The subject property is an ideal extension of the recently developed single-family and multi-family residential housing in Waikapū, Maui Lani, and Kehalani. From a land use standpoint, the property's location is considered appropriate for workforce residential housing development as it is bordered by housing development and commercial centers, and its close proximity to existing urban residential developments, infrastructure, and public services.

- *It shall not include lands, the urbanization of which will contribute towards scattered spot urban development, necessitating unreasonable investment in the public infrastructure or support services.*

Discussion and Response:

The proposed reclassification and application for affordable apartment rental housing project pursuant to Section 201H-38, HRS approval does not contribute to scattered spot urban development. The project site is adjacent to existing Kehalani and Maui Lani residential subdivisions and commercial centers at Kehalani and Maui Lani Parkway. The project site is within the UGB . The project site is located in close proximity of Wailuku Town – center of government services. The proposed development will not necessitate unreasonable public investment in infrastructural facilities or public services. The applicant will comply with all applicable provisions regarding rules and regulations pertaining to infrastructure facilities.

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

Discussion and Response:

The subject property is characterized as lands having an average slope of five (5) percent, and is suitable for urban uses.

C. HAWAI'I STATE PLAN

Chapter 226, HRS, also known as the Hawai'i State Plan, is a long-range comprehensive plan which serves as a guide for the future long-term development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. The Plan consists of three (3) parts. Part I includes the Overall Theme, Goals, Objectives, and Policies; Part II includes Planning, Coordination, and Implementation; and Part III establishes Priority Guidelines. Inasmuch as Part II of the State Plan covers its administrative structure and implementation process, discussion of the proposed project's applicability to Part II is not appropriate. Below is an analysis of the project's applicability to Part I and Part III of the Hawai'i State Plan.

Hawai'i State Plan, Chapter 226, HRS Part I. 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			
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: 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. (1) 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. (2) 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.			

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Analysis: **The Wailuku Apartment Rental Housing Project provides a well designed aesthetically pleasing multi-family residential housing project providing both affordable and market rental accommodations in an area that is close to the commercial centers of Wailuku and Kahului. The proposed project is intended to reflect and meet the housing needs for Maui's working families to create a livable neighborhood with amenities outside of the residential units. These amenities include a community center/leasing office building, a swimming pool, and four (4) children play areas.** **The architectural design of the proposed rental units will reflect the character of its neighboring existing residential development in the surrounding area.**			
Chapter 226-5 Objective and Policies for Population			
Objective: It shall be the objective in planning for the State's population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter.	✓		
Policies:			
(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.	✓		
(2) Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.			✓
(3) Promote increased opportunities for Hawaii's people to pursue their socio-economic aspirations throughout the islands.	✓		
(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.			✓
(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.			✓
(6) Pursue an increase in federal assistance for states with a greater proportion of foreign immigrants relative to their state's population.			✓
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable rental multi-family residential housing in close proximity to the commercial centers of Wailuku and Kahului where job opportunities are available. The proposed project will also create employment opportunities in the construction industry during build out of the project.**			
Chapter 226-6 Objectives and policies for the economy – – in general			
Objectives: Planning for the State's economy in general shall be directed toward achievement of the following objectives:			
(1) Increased and diversified employment opportunities to achieve full	✓		

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
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:			
(1) Promote and encourage entrepreneurship within Hawaii by residents and nonresidents of the State.			✓
(2) 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.			✓
(3) Promote Hawaii as an attractive market for environmentally and socially sound investment activities that benefit Hawaii's people.			✓
(4) Transform and maintain Hawaii as a place that welcomes and facilitates innovative activity that may lead to commercial opportunities.			✓
(5) Promote innovative activity that may pose initial risks, but ultimately contribute to the economy of Hawaii.			✓
(6) Seek broader outlets for new or expanded Hawaii business investments.			✓
(7) Expand existing markets and penetrate new markets for Hawaii's products and services.			✓
(8) Assure that the basic economic needs of Hawaii's people are maintained in the event of disruptions in overseas transportation.			✓
(9) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.			✓
(10) 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.			✓
(11) Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility.			✓
(12) Encourage innovative activities that may not be labor-intensive, but may otherwise contribute to the economy of Hawaii.			✓
(13) Foster greater cooperation and coordination between the government and private sectors in developing Hawaii's employment and economic growth opportunities.			✓
(14) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.	✓		
(15) Maintain acceptable working conditions and standards for Hawaii's workers.			✓
(16) Provide equal employment opportunities for all segments of Hawaii's population through affirmative action and nondiscrimination measures.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(17) 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.			✓
(18) Encourage businesses that have favorable financial multiplier effects within Hawaii's economy, particularly with respect to emerging industries in science and technology.			✓
(19) Promote and protect intangible resources in Hawaii, such as scenic beauty and the aloha spirit, which are vital to a healthy economy.			✓
(20) Increase effective communication between the educational community and the private sector to develop relevant curricula and training programs to meet future employment needs in general, and requirements of new or innovative potential growth industries in particular.			✓
(21) 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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing which will improve the living standard for local families. In the short term, the proposed project will provide jobs in the construction industry during build out of the proposed project. The proposed project will provide a wide-range of economic activities through construction of the proposed project's improvements and housing development for working families in the Kahului-Wailuku Community Plan region and for the island residents. It is anticipated that the development of this project will generate significant expenditures by the developer during the construction of the site work and construction of the apartment buildings. With the infusion of new capital expenditures on this project, these investments are expected to favorably impact the Maui economy on a broad scale. With the capital investment during the initial phase of the project development and construction of the apartment units, significant direct new construction job opportunities are expected to be created by this project. At the time of operation of the rental project, it will also be employing on staff leasing agents, property manager, and maintenance staff as well as outsourcing to businesses to help maintain the property.**			
Chapter 226-7 Objectives and policies for the economy – – agriculture.			
Objectives: Planning for the State's economy with regard to agriculture shall be directed towards achievement of the following objectives:			✓
(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 the best use of natural resources.			✓
(3) Provide the governor and the legislature with information and options			✓

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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 food producers and consumers in the State, nation, and world.			✓
(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) In addition to the State's priority on food, 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.			✓
(13) Promote economically competitive activities that increase Hawaii's agricultural self-sufficiency, including the increased purchase and use of Hawaii-grown food and food products by residents, businesses, and governmental bodies as defined under section 103D-104.			✓
(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 nonfeasible agricultural production to economically viable agricultural uses.			✓
(17) Perpetuate, promote, and increase use of traditional Hawaiian farming systems, such as the use of loko i'a, māla, and irrigated lo'i, and growth of traditional Hawaiian crops, such as kalo, 'uala, and 'ulu.			✓
(18) Increase and develop small-scale farms.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State economic goals and objectives related to agriculture.**			

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Chapter 226-8 Objective and policies for the economy – – visitor industry.			
Objective: 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.			✓
Policies:			
(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.			✓
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State economic goals and objectives related to the visitor industry.**			
Chapter 226-9 Objective and policies for the economy – – federal expenditures.			
Objective: 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.			✓
Policies:			
(1) Encourage the sustained flow of federal expenditures in Hawaii that generates long-term government civilian employment;			✓
(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;			✓

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(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State economic goals and objectives related to federal expenditures.**			
Chapter 226-10 Objective and policies for the economy – – potential growth and innovative activities.			
Objective: Planning for the State's economy with regard to potential growth and innovative activities shall be directed towards achievement of the objective of development and expansion of potential growth and innovative activities that serve to increase and diversify Hawaii's economic base.			✓
Policies:			
(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, renewable energy development, creative media, health care, and science and technology-based sectors;			✓
(2) Facilitate investment in innovative activity that may pose risks or be less labor-intensive than other traditional business activity, but if successful, will generate revenue in Hawaii through the export of services or products or substitution of imported services or products;			✓
(3) Encourage entrepreneurship in innovative activity by academic researchers and instructors who may not have the background, skill, or initial inclination to commercially exploit their discoveries or achievements;			✓
(4) Recognize that innovative activity is not exclusively dependent upon individuals with advanced formal education, but that many self-taught, motivated individuals are able, willing, sufficiently knowledgeable, and equipped with the attitude necessary to undertake innovative activity;			✓
(5) Increase the opportunities for investors in innovative activity and talent engaged in innovative activity to personally meet and interact at cultural, art, entertainment, culinary, athletic, or visitor-oriented events without a business focus;			✓
(6) Expand Hawaii's capacity to attract and service international programs and activities that generate employment for Hawaii's people;			✓
(7) Enhance and promote Hawaii's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts;			✓
(8) Accelerate research and development of new energy-related industries based on wind, solar, ocean, underground resources, and solid waste;			✓
(9) Promote Hawaii's geographic, environmental, social, and technological advantages to attract new or innovative economic activities into the State;			✓

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(10) Provide public incentives and encourage private initiative to attract new or innovative industries that best support Hawaii's social, economic, physical, and environmental objectives;			✓
(11) Increase research and the development of ocean-related economic activities such as mining, food production, and scientific research;			✓
(12) 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;			✓
(13) Foster a broader public recognition and understanding of the potential benefits of new or innovative growth-oriented industry in Hawaii;			✓
(14) 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;			✓
(15) Increase research and development of businesses and services in the telecommunications and information industries;			✓
(16) Foster the research and development of nonfossil fuel and energy efficient modes of transportation; and			✓
(17) Recognize and promote health care and health care information technology as growth industries.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not directly applicable to the State economic goals and objectives related to economic growth and innovative activities. However, with the large infusion of capital investment for the construction of the proposed project, it is anticipated to provide a wide range of direct and indirect economic activities, both short and long term. It is anticipated that significant construction jobs will be created during the development of the site and construction of the project.**			
Chapter 226-10.5 Objectives and policies for the economy – – information industry.			
Objective: Planning for the State's economy with regard to telecommunications and information technology shall be directed toward recognizing that broadband and wireless communication capability and infrastructure are foundations for an innovative economy and positioning Hawaii as a leader in broadband and wireless communications and applications in the Pacific Region.			✓
Policies:			
(1) Promote efforts to attain the highest speeds of electronic and wireless communication within Hawaii and between Hawaii and the world, and make high speed communication available to all residents and businesses in Hawaii;			✓
(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth and innovation in Hawaii's economy;			✓
(3) Facilitate the development of new or innovative business and service ventures in the information industry which will provide employment opportunities for the people of Hawaii;			✓
(4) Encourage mainland- and foreign-based companies of all sizes, whether information technology-focused or not, to allow their principals, employees,			✓

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or contractors to live in and work from Hawaii, using technology to communicate with their headquarters, offices, or customers located out-of-state;			
(5) Encourage greater cooperation between the public and private sectors in developing and maintaining a well-designed information industry;			✓
(6) 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;			✓
(7) Provide opportunities for Hawaii's people to obtain job training and education that will allow for upward mobility within the information industry;			✓
(8) Foster a recognition of the contribution of the information industry to Hawaii's economy; and			✓
(9) Assist in the promotion of Hawaii as a broker, creator, and processor of information in the Pacific.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State economic goals and objectives related to the information industry.**			
Chapter 226-11 Objectives and policies for the physical environment – – land based, shoreline, and marine resources.			
Objectives: Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:	✓		
(1) Prudent use of Hawaii's land-based, shoreline, and marine resources.	✓		
(2) Effective protection of Hawaii's unique and fragile environmental resources.	✓		
Policies:			
(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.			✓

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(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project makes prudent use of Hawai'i's land base resources by utilizing land in close proximity to the commercial centers of Wailuku and Kahului which is environmentally suitable for residential purposes. An environmental assessment is being carried out to ensure the proposed project does not adversely impact Hawai'i's unique and fragile environmental resources. The planning and design concept of the proposed project will reflect the architectural character of the neighboring residential development in Kehalani and Wailuku Town. View corridors and topographic features will be respected in the project design. The project's design concept will meet the intent and stated objectives of HRS 226-11. Based on thorough field assessment of the site by the applicant's biological resources consultant, no rare or endangered plant and animal species or habitats are present onsite. Native habitats do not exist on the site given its history of agricultural activities of the site and equipment and material storage baseyard use.**			
Chapter 226-12 Objective and policies for the physical environment -- scenic, natural beauty, and historic resources.			
Objective: Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.	✓		
Policies:			
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project has been carefully designed with low building profiles and landscaping to promote the maintenance of scenic views and vistas.**			
Chapter 226-13 Objectives and policies for the physical environment -- land, air, and water quality.			
Objectives: Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives.	✓		
(1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.	✓		

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(2) Greater public awareness and appreciation of Hawaii's environmental resources.	✓		
Policies:			
(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.	✓		
(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.			✓
Analysis: The Wailuku Apartment Rental Housing Project has been designed to be compatible with the neighboring residential community and incorporates drainage improvements which will enhance groundwater quality and reduce stormwater runoff on adjacent and downstream properties. The proposed project is located in close proximity to existing infrastructure, services and facilities and will not extend existing services nor contribute to urban sprawl. The project also proposes a 3-story garden style architecture which provides a more efficient design. The proposed project will be designed to be complimentary to the neighboring existing residential developments in Kehalani, Maui Lani and Wailuku Town and help to meet the housing needs of Maui's working families within the Kahului-Wailuku Community Plan region. The proposed project is located along the main thoroughfare to west and central Maui and in very close proximity to the Kahului and Wailuku regions as well as Paia and South Maui regions. The project is inland and will not have any adverse impacts on shoreline resources. Also, the project site is in close proximity to existing public services and facilities that are critical to the success of the project.			
Chapter 226-14 Objective and policies for facility systems – – in general.			
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.	✓		
Policies:			
(1) Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with 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	✓		

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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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project is located within the MIP's UGB. The proposed project is located in an area designated for future urban use by the Wailuku-Kahului Community Plan Map. A District Boundary Amendment application will be processed to ensure compatibility with the State land use plan 'Urban" designation. The planning and design concept of the proposed project will reflect the architectural character of the neighboring residential development. The Applicant met with affected County agencies to ensure that the required facility systems for the project meet County and State standards. The proposed project will ensure that the required facility systems for the project can be supported within resource capacities of the project and at reasonable costs to the end users.**			
Chapter 226-15 Objectives and policies for facility systems – – solid and liquid waste.			
Objectives: Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives:			
(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.	✓		
(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.	✓		
Policies:			
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project will connect to the County wastewater system. Coordination with the County Department of Environmental Management indicates there is available wastewater capacity for the project, however, wastewater capacity and hook up connection cannot be confirmed until an application is made. The Department of Environmental Management also indicated that disposal of construction waste and waste generated by Project's residents will be disposed at the County's Central Maui Landfill.**			
Chapter 226-16 Objective and policies for facility systems – – water.			
Objective: Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.	✓		

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Policies:			
(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.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project is located in an area that is serviced by existing County water infrastructure. According to the County Department of Water Supply (DWS), in its letter dated October 23, 2017, the project area is served by the Central Maui system and overlies the 'Īao aquifer, with a sustainable yield of 20 million gallons per day (gdp). DWS further noted that an 8-inch waterline that runs parallel to Ku'ikahi Drive, as well as an 18-inch water transmission line adjacent to the east property line are components of the water delivery system. The project will implement Best Management Practices (BMPs) regarding water conservation measures as recommended by DWS in its letter of October 23, 2017. The project has been designed to incorporate water conservation design features.**			
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:			✓
(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.			✓
Policies:			
(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;	✓		

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(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 diversification;			✓
(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.			✓
Analysis: **The proposed Wailuku Apartment Rental Housing Project is consistent with the objectives and policies of HRS 226-17. According to the County Department of Transportation, in its letter of October 18, 2017, there are three (3) bus routes that operate within the vicinity of the proposed project on Wai'ale Road, Wailuku. The two (2) public bus stops nearest to the project are at Ka Hale A Ke Ola on Wai'ale Road and on Kamole Street in the Kehalani Subdivision.**			
Chapter 226-18 Objectives and policies for facility systems – – energy.			
Objectives: 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:	✓		
(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;			✓
(2) Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation.	✓		
(3) Greater diversification of energy generation in the face of threats to Hawaii's energy supplies and systems;	✓		
(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use; and			✓
(5) Utility models that make the social and financial interests of Hawaii's utility customers a priority.			✓
(b) To achieve the energy objectives, it shall be the policy of this State to ensure the short- and long-term provision of adequate, reasonably prices, and dependable energy services to accommodate demand.			✓
Policies:			
(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;			✓

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(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;			✓
(C) Adoption of energy-efficient practices and technologies; and			✓
(D) Increasing energy efficiency and decreasing energy use in public infrastructure			✓
(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; and			✓
(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;			✓
(10) Provide priority handling and processing for all state and county permits required for renewable energy projects;			✓
(11) Ensure that liquefied natural gas is used only as a cost-effective transitional, limited-term replacement of petroleum for electricity generation and does not impede the development and use of other cost-effective renewable energy sources; and			✓
(12) Promote the development of indigenous geothermal energy resources that are located on public trust land as an affordable and reliable source of firm power for Hawaii.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is in support of the State's facility systems goals and objectives related to energy. The Applicant is exploring the feasibility of installing photovoltaic solar systems within the project to reduce energy costs and to increase energy self-sufficiency. The Applicant met with the representatives of the Maui Electric Company (MECO) to discuss the proposed installation of solar systems within the project to ensure that MECO's electrical grid systems are adequate for such improvements.**			

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Chapter 226-18.5 Objectives and policies for facility systems – – telecommunications.			
Objectives:			
(a) 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.			✓
(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.			✓
Policies:			
(1) Facilitate research and development of telecommunications systems and resources;			✓
(2) Encourage public and private sector efforts to develop means for adequate, ongoing telecommunications planning;			✓
(3) Promote efficient management and use of existing telecommunications systems and services; and			✓
(4) Facilitate the development of education and training of telecommunications personnel.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State facility systems goals and objectives related to telecommunications.**			
Chapter 226-19 Objectives and policies for socio-cultural advancement – – housing.			
Objectives: Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives:	✓		
(1) Greater opportunities for Hawaii's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more 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.	✓		
Policies:			
(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			✓

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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.	✓		
(8) Promote research and development of methods to reduce the cost of housing construction in Hawaii.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project effectively provides rental housing for Hawai'i residents in proximity to job availability. The proposed project provides affordable and market rental housing in an area that is in close proximity to the commercial areas of Wailuku and Kahului. The proposed project will increase affordable and market rental opportunities and choices in size of rental units. The proposed apartment rental project will help to meet the housing needs of Maui's residents and will increase apartment rental opportunities for Maui's workforce. It is also important to note that most residential projects are for-sale home ownership opportunities and that workforce rental projects of this scale have been minimal. About 40 percent of Maui's demand for housing are renters. This project will provide the opportunity for 324 households to be able to rent in a quality project. The project will also be offering a broad range of unit sizes from studios, 1-, 2-, and 3-bedrooms to accommodate small to large households. The unit sizes range approximately from 400-935 sf. Since the project will also align with HHFDC's income categories as defined in Hawai'i Administrative Rules 15-307-2 (State Assisted Land and Housing Development Program), 195 units will be offered at the low-moderate and moderate income levels with the remaining 129 units at market priced rents. The design of the project will be complimentary with the surrounding residential and commercial developments in the area, focusing on an architecture that keeps in tone and style familiar in Wailuku. The density for the project is similar to many of the multi-family and condominium projects in the surrounding area and Wailuku Town, which creates an economy of scale that lowers construction costs and is in harmony with what can be currently found in the regional area. The proposed project is centrally located within the Wailuku-Kahului Community Plan region where a third of Maui's housing inventory is located and is conveniently accessible to public facilities, schools, transportation, and medical services making it a prime location for families who are renters.**			
Chapter 226-20 Objectives and policies for socio-cultural advancement – – health.			
Objectives: Planning for the State's socio-cultural advancement with regard to health shall be directed towards achievement of the following objectives:			✓
(1) Fulfillment of basic individual health needs of the general public.			✓
(2) Maintenance of sanitary and environmentally healthful conditions in Hawaii's communities.			✓
(3) Elimination of health disparities by identifying and addressing social determinants of health.			✓
Policies:			
(1) Provide adequate and accessible services and facilities for prevention and treatment of physical and mental health problems, including substance			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
abuse.			
(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.			✓
(3) Encourage public and private efforts to develop and promote statewide and local strategies to reduce health care and related insurance costs.			✓
(4) Foster an awareness of the need for personal health maintenance and preventive health care through education and other measures.			✓
(5) Provide programs, services, and activities that ensure environmentally healthful and sanitary conditions.			✓
(6) Improve the State's capabilities in preventing contamination by pesticides and other potentially hazardous substances through increased coordination, education, monitoring, and enforcement.			✓
(7) Prioritize programs, services, interventions, and activities that address identified social determinants of health to improve native Hawaiian health and well-being consistent with the United States Congress' declaration of policy as codified in title 42 United States Code section 11702, and to reduce health disparities of disproportionately affected demographics, including native Hawaiians, other Pacific Islanders, and Filipinos. The prioritization of affected demographic groups other than native Hawaiians may be reviewed every ten years and revised based on the best available epidemiological and public health data.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State's socio-cultural advancement goals and objectives related to health.**			
Chapter 226-21 Objectives and policies for Socio-cultural advancement – – education.			
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.			✓
Policies:			
(1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.			✓
(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.			✓
(3) Provide appropriate educational opportunities for groups with special needs.			✓
(4) Promote educational programs which enhance understanding of Hawaii's cultural heritage.			✓
(5) Provide higher educational opportunities that enable Hawaii's people to adapt to changing employment demands.			✓
(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			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
opportunities.			
(7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.			✓
(8) Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.			✓
(9) Support research programs and activities that enhance the education programs of the State.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State's socio-cultural advancement goals and objectives related to education.**			
Chapter 226-22 Objective and policies for socio-cultural advancement – – social services.			
Objective: 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.			✓
Policies:			
(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.			✓
(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.			✓
(3) Facilitate the adjustment of new residents, especially recently arrived immigrants, into Hawaii's communities.			✓
(4) Promote alternatives to institutional care in the provision of long-term care for elder and disabled populations.			✓
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State's socio-cultural advancement goals and objectives related to social services.**			
Chapter 226-23 Objective and policies for socio-cultural advancement – – leisure.			
Objective: 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.			✓
Policies:			
(1) Foster and preserve Hawaii's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(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.			✓
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State's socio-cultural advancement goals and objectives related to leisure.**			
Chapter 226-24 Objective and policies for socio-cultural advancement – – individual rights and personal well-being.			
Objective: 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.			✓
Policies:			
(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.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State's socio-cultural advancement goals and objectives related to individual rights and personal well-being.**			
Chapter 226-25 Objective and policies for socio-cultural advancement – – culture.			
Objective: 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, values, customs, and arts of Hawaii's people.			✓
Policies:			
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State's socio-cultural advancement goals and objectives related to culture.**			
Chapter 226-26 Objectives and policies for socio-cultural advancement – – public safety.			
Objective: Planning for the State's socio-cultural advancement with regard to public safety shall be directed towards the achievement of the following objectives:	✓		
(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.	✓		
Policies (Public Safety):			
(1) Ensure that public safety programs are effective and responsive to community needs.			✓
(2) Encourage increased community awareness and participation in public safety programs.			✓
Policies (Public Safety-Criminal Justice):			
(1) Support criminal justice programs aimed at preventing and curtailing criminal activities.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(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.			✓
Policies (Public Safety – Emergency Management):			
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project will provide mid-block intersection improvements from the project to the Kehalani Village Center to promote a convenient safe pedestrian crossing across Ku'ikahi Drive.**			
Chapter 226-27 Objectives and policies for socio-cultural advancement – – government.			
Objectives: 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.			✓
Policies:			
(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.			✓
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the State's socio-cultural advancement goals and objectives related to government.**			

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
Chapter 226-101: Purpose. The purpose of this part is to establish overall priority guidelines to address areas of statewide concern.			
Chapter 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 seven major areas of statewide concern which merit priority attention: economic development, population growth and land resource management, affordable housing, crime and criminal justice, quality education, principles of sustainability, and climate change adaptation.			
Chapter 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:			
(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; and			✓
(B) Encourage investments in innovative activities that have a nexus to the State, such as:			✓
(i) Present or former residents acting as entrepreneurs or principals;			✓
(ii) Academic support from an institution of higher education in Hawaii;			✓
(iii) Investment interest from Hawaii residents;			✓
(iv) Resources unique to Hawaii that are required for innovative activity; and			✓
(v) Complementary or supportive industries or government programs or projects.			✓
(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 processes for building and development permit and review, and telecommunication infrastructure installation approval and eliminate or consolidate other burdensome or duplicative governmental requirements imposed on business, where scientific evidence indicates that public health, safety and welfare 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.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
(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.			✓
(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:			
(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.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
(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:			
(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 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.			✓
(11) Encourage residents and visitors to support Hawaii's farmers by purchasing locally grown food and food products.			✓
(e) Priority guidelines for water use and development:			
(1) Maintain and improve water conservation programs to reduce the overall water consumption rate.			✓
(2) Encourage the improvement of irrigation technology and promote the use of nonpotable water for agricultural and landscaping purposes.			✓
(3) Increase the support for research and development of economically feasible alternative water sources.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
(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:			
(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:			
(1) Establish an information network, with an emphasis on broadband and wireless infrastructure and capability, that will serve as the foundation of and catalyst for overall economic growth and diversification in Hawaii.			✓
(2) Encourage the development of services such as financial data processing, a 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, peripherals, and applications; data conversion and data entry services; and home or cottage services such as computer programming, secretarial, and accounting services.			✓
(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.			✓
(7) Encourage the location or co-location of telecommunication or wireless information relay facilities in the community, including public areas, where scientific evidence indicates that the public health, safety, and welfare would not be adversely affected.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
Analysis: **The project will provide a variety of economic activities for the Wailuku Town and in the Kahului-Wailuku Community Plan regions. Because of the anticipated large investment capital that will be infused in the development of the proposed apartment rental housing project, short-term construction employment opportunities will be created as a result from the development of the subdivision. Approximately $70 million dollars (exclusive of soft costs) will be invested for the construction of the proposed project, thereby creating short-term construction related jobs.** **The project will also employ staff during lease-up and operations, which will require a property manager, leasing agents, and maintenance staff giving economic opportunity to those who need a job in the area. The project also intends to contract out services during operations to third party businesses on Maui that will perform maintenance assistance, such as landscaping, repairs during tenant move-outs, and other administrative services in the future which will benefit the Maui economy in the long run.** **Another benefit for Maui County is that the project will provide quality housing to attract the much-needed jobs that certain industries have not been able to fill such as healthcare.**			
Chapter 226-104: Population growth and land resources priority guidelines.			
(a) Priority guidelines to effect desired statewide growth and distribution:			
(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:			
(1) Encourage urban growth primarily to existing urban areas where adequate 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.	✓		

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
(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 noncontiguous 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, conservation lands, and other limited resources for future generations.	✓		
(13) Protect and enhance Hawaii's shoreline, open spaces, and scenic resources.	✓		
Analysis: **The proposed project is in keeping with HRS 226-104 Priority Guidelines on Population, Growth, and Land Resources. The project is located within the UGB where adequate public facilities and services are already available, such as water and wastewater services for the proposed project. In addition, the project is located in very close proximity to parks, schools, medical facilities, fire, and police services and other public facilities that serve the Wailuku-Kahului Community Plan region. The proposed apartment rental housing project will help meet the existing and projected housing needs for Maui's working families. The project location is far inland and will not have any adverse impacts on the shoreline or conservation lands.**			
Chapter 226-105: Crime and criminal justice.			
Priority guidelines in the area of crime and criminal justice:			
(1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
(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 crimes and to minimize the costs of victimization.			✓
Analysis: **The Wailuku Apartment Rental Housing Project will provide affordable and market multi-family residential housing and the project is not applicable to the State's priority guidelines related to crime and criminal justice.**			
Chapter 226-106: Affordable housing.			
Priority guidelines for the provision of affordable housing:			
(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.	✓		

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
Analysis: **Sixty percent of the total apartment units will be restricted for families earning 80 percent to 140 percent of HHFDC's Maui's median income. The remaining 40 percent will be unrestricted units that are market priced apartments. The project site has been fallow and has not been used for agricultural purposes for decades and is currently under utilized for temporary office trailers. The project will add diversity to the product mix in the region which lacks in affordable and moderately priced rentals. The site is centrally located within the Wailuku-Kahului Community Plan region and is surrounded with existing residential housing development. The proposed project is complementary and consistent with its neighboring residential developments.**			
Chapter 226-107: Quality education.			
Priority guidelines to promote quality education:			
(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.			✓
(6) Encourage programs that increase the public's awareness and understanding of the impact of information technologies on our lives;			✓
(7) Pursue the establishment of Hawaii's public and private universities and colleges as research and training centers of the Pacific;			✓
(8) Develop resources and programs for early childhood education;			✓
(9) Explore alternatives for funding and delivery of educational services to improve the overall quality of education; and			✓
(10) Strengthen and expand educational programs and services for students with special needs.			✓
Analysis: **The Wailuku Apartment Rental Housing Project will provide affordable and market multi-family residential housing and is not applicable to the State's priority guidelines related to quality education.**			
CHAPTER 226-108: Sustainability			
Priority guidelines and principles to promote sustainability shall include:			
(1) Encouraging balanced economic, social, community, and environmental priorities;	✓		
(2) Encouraging planning that respects and promotes living within the natural resources and limits of the State;			✓
(3) Promoting a diversified and dynamic economy;			✓
(4) Encouraging respect for the host culture;			✓
(5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;	✓		
(6) Considering the principles of the ahupuaa system; and			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES	S	N/S	N/A
(7) Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawaii.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project provides affordable and market rental housing in a manner that meets the current housing needs without compromising the needs of future generations and that is sustainable. The project site is located on fallow agricultural land that is underutilized as a temporary construction and administrative sales offices.**			
CHAPTER 226-109: Climate change adaptation			
Priority guidelines and principles to promote climate change adaptation shall include:			
(1) Ensure that Hawaii's people are educated, informed, and aware of the impacts climate change may have on their communities;			✓
(2) Encourage community stewardship groups and local stakeholders to participate in planning and implementation of climate change policies;			✓
(3) Invest in continued monitoring and research of Hawaii's climate and the impacts of climate change on the State;			✓
(4) Consider native Hawaiian traditional knowledge and practices in planning for the impacts of climate change;			✓
(5) Encourage the preservation and restoration of natural landscape features, such as coral reefs, beaches and dunes, forests, streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate change;			✓
(6) Explore adaptation strategies that moderate harm or exploit beneficial opportunities in response to actual or expected climate change impacts to the natural and built environments;			✓
(7) Promote sector resilience in areas such as water, roads, airports, and public health, by encouraging the identification of climate change threats, assessment of potential consequences, and evaluation of adaptation options;			✓
(8) Foster cross-jurisdictional collaboration between county, state, and federal agencies and partnerships between government and private entities and other nongovernmental entities, including nonprofit entities;			✓
(9) Use management and implementation approaches that encourage the continual collection, evaluation, and integration of new information and strategies into new and existing practices, policies, and plans; and			✓
(10) Encourage planning and management of the natural and built environments that effectively integrate climate change policy.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides market and affordable multi-family residential housing and is not applicable to the goals and objectives related to climate change.**			

D. ACT 127, RELATING TO RENTAL HOUSING

The Legislature of the State of Hawai'i enacted Act 127, Relating to Rental Housing, and became effective on July 1, 2016. The purpose of the Act is to address rental housing, and more specifically: (1) establishes an affordable rental goal; and (2) establishes a special action team on affordable rental housing, chaired by the Director of the Office of Planning to make recommendations on actions to promote rental housing. Under the Act, the legislature establishes the goal for the state government, by itself or jointly with other

parties, to develop or vest the development of at least 22,500 affordable rental housing units, ready for occupancy between January 1, 2017 and December 31, 2026. Furthermore, the legislature believes that the establishment of an affordable rental housing goal and special action team to make recommendations to achieve the goal are imperative.

Discussion and Response:

The proposed Wailuku Apartment Rental Housing Project meets the stated rental housing goal pursuant to Act 127. The proposed project consists of 324 apartment rental units whereby 60 percent (195 units) of the total units will be restricted for families earning 80 percent to 140 percent of HHFDC's Maui area median income. The remaining 40 percent (129 units) will be unrestricted units that are market-priced apartments. The proposed project will help address the critical housing needs of Maui's working families.

E. STATE FUNCTIONAL PLANS

The State Functional Plans (SFP) implement the Hawai'i State Plan by identifying needs, problems, and issues, and by recommending policies and priority actions which address the identified areas of concern. The proposed project is consistent with the SFPs, as set out below.

The SFPs define actions for implementation of the Hawai'i State Plan through the identification of needs, problems, and issues, and recommendations on policies and priorities, which address the identified areas of concern.

1. State Agricultural Functional Plan

The Agricultural Functional Plan seeks to ensure the continued viability of agriculture throughout the State.

The proposed action is to reclassify approximately 14.416 acres of land from the State "Agricultural" district to the State "Urban" district for the proposed apartment rental project. As noted earlier in this report, the subject property has been vacant and remained fallow for decades and has not been used for any agricultural activities in recent history. The subject site has been used recently as a temporary storage for construction equipment and materials. The subject property is in very close proximity to existing urban uses, particularly, residential development. It is also within the MIP's UGB, therefore, the proposed apartment rental project at the subject site is an appropriate use of the land for urban residential development. The proposed action is not anticipated to adversely impact agricultural productivity on the island.

2. State Housing Functional Plan

The Housing Functional Plan seeks to increase home ownership and rental housing availability.

According to the SMS Hawaii Housing Planning Study, 2016 prepared for the County of Maui, a significant number of Maui households live in overcrowded conditions or are "doubled-up" with other families. According to the SMS report, crowding continues to be a problem in the housing market and in 2016 affected 21.4 percent of households in Maui County.

According to the Hawaii Housing Planning Study 2016, renters in Maui County represented 39 percent of households and paid the second highest amount ($2,106) to cover their monthly housing expenses. Affordable units were most limited in Maui County, with just 48.6 percent of the island's units affordable to Maui's lower income households. This growing public demand for affordable housing indicates a current shortage of housing inventory especially in the Wailuku-Kahului Community Plan District. The proposed 324 apartment rental units planned within the subject property will help to address a critical community need, as well as the State Housing Functional Plan's Act 227, SLH goal of 22,500 rental units by 2026.

F. COUNTYWIDE POLICY PLAN

The Countywide Policy Plan was adopted in March 2010 and is a comprehensive policy document for the islands of Maui County to the year 2030. The plan replaces the *General Plan of the County of Maui 1990 Update* and provides the policy framework for the development of the forthcoming Maui Island Plan as well as for updating the nine (9) detailed Community Plans.

The Countywide Policy Plan provides broad goals, objectives, policies and implementing actions that portray the desired direction of the County's future. Goals are intended to describe a desirable condition of the County by the year 2030 and are intentionally general. Objectives tend to be more specific and may be regarded as milestones to achieve the larger goals. Policies are not intended as regulations, but instead provide a general guideline for County decision makers, departments, and collaborating organizations toward the attainment of goals and objectives. Implementing actions are specific tasks, procedures, programs, or techniques that carry out policy.

Discussion of how the proposed project conforms to the relevant goals, objectives, policies, and implementing actions of the Countywide Policy Plan is provided below.

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
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:			
(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 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 nonprofit 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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project will not adversely impact the County's natural environment nor adversely impact open space resources. An environmental assessment has been carried out to ensure the natural environment is not impacted. As well, a view analysis has been carried out on the project to ensure protection of scenic resources.**			
Objective:			
(2) Improve the quality of environmentally sensitive, locally valued natural resources and native ecology of each island.			✓
Policies:			
(a) Protect and restore nearshore reef environments and water quality.			✓
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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 groundwater protection.			✓
Implementing Actions:			
(a) Develop regulations to minimize runoff of pollutants into nearshore waters and reduce nonpoint and point source pollution.			✓
Analysis: **The Wailuku Apartment Rental Housing Project is not located in proximity to the coastline and, as such, the project will not adversely impact the nearshore reef environment. Best Management Practices will be incorporated into the stormwater management system to protect water quality.**			
Objective:			
(3) Improve the stewardship of the natural environment.	✓		
Policies:			
(a) Preserve and protect natural resources with significant scenic, economic, cultural, environmental, or recreational value.			✓
(b) Improve communication, coordination, and collaboration among government agencies, nonprofit 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 shorelines 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 nonpoint 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:			
(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 greenhouse-gas emissions.			✓
(c) Establish a baseline inventory of available natural resources and their respective carrying capacities.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analysis: **The Wailuku Apartment Rental Housing Project will employ Best Management Practices (BMP) to prevent impacts from construction, including temporary erosion control, stormwater management and dust control. A biological resources inventory was carried out for the project which identified flora and fauna communities in the project area. No endangered or threatened species were identified by said report.**			
Objective:			
(4) Educate residents and visitors about responsible stewardship practices and the interconnectedness of the natural environment and people.	✓		
Policies:			
(a) Expand education about native flora, fauna, and ecosystems.	✓		
(b) Align priorities to recognize that the health of the natural environment and the health of people are inextricably linked.	✓		
(c) Promote programs and incentives that decrease greenhouse-gas emissions and improve environmental stewardship.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the educational objective for responsible stewardship practices are not applicable to the project.**			
B. PRESERVE LOCAL CULTURES AND TRADITIONS			
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.	✓		
Objective:			
(1) Perpetuate the Hawaiian culture as a vital force in the lives of residents.			✓
Policies:			
(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 values 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 the 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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analysis: **A Cultural Impact Assessment (CIA) was conducted for the Wailuku Apartment Rental Housing Project. The CIA addresses issues relating to the protection of Native Hawaiian rights.**			
Objective:			
(2) Emphasize respect for our island lifestyle and our unique local cultures, family, and natural environment.	✓		
Policies:			
(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.			✓
(b) Perpetuate a respect for diversity, and recognize the historic blending of cultures and ethnicities.			✓
(c) Encourage the perpetuation of each culture's unique cuisine, attire, dance, music, and folklore, and other unique island traditions and recreational activities.			✓
(d) Recognize the interconnectedness between the natural environment and the cultural heritage of the islands.	✓		
(e) Protect and prioritize funding for recreational activities that support local cultural practices, such as surfing, fishing, and outrigger-canoe paddling.			✓
Analysis: **The project's CIA recognizes the relationship between the natural environment and cultural resources found in the project vicinity.**			
Objective:			
(3) Preserve for present and future generations the opportunity to know and experience the arts, culture, and history of Maui County.			✓
Policies:			
(a) Foster teaching opportunities for cultural practitioners to share their knowledge and skills.			✓
(b) Support the development of cultural centers.			✓
(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: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objective of the arts, culture and history are not directly applicable to the project.**			
Objective:			
(4) Preserve and restore significant historic architecture, structures, cultural sites, cultural districts, and cultural landscapes.	✓		

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Policies:			
(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.			✓
(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:			
(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: **An Archaeological Assessment Report (AAR) was conducted for the Wailuku Apartment Rental Housing Project. The AAR identified historic sites found on the property. Should any archaeological resources be discovered during ground altering activities, work shall cease in the immediate area of the find and coordination will be undertaken with SHPD.**			
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:			
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analysis: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives to improve education are not directly applicable to the project.**			
Objective:			
(2) Provide nurturing learning environments that build skills for the 21st century.			✓
Policies:			
(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 environments, 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 Hawai'i'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.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives of providing nurturing learning environments are not directly applicable to the project. Nevertheless, the proposed project will improve walkways and provide bicycle lanes to enable safe walking and bicycling programs for local school children in vicinity of the project site.**			
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:			
(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.			✓
(c) Attract graduate-level research programs and institutions.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives of providing educational opportunities for Maui residents are not directly applicable to the project.**			
Objective:			
(4) Maximize community-based educational opportunities.			✓
Policies:			
(a) Encourage the State and others to expand pre-school, after-school, and homebased (parent-child) learning.			✓
(b) Support public-private partnerships to develop youth-internship, -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 Hawai'i'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: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives of maximizing community-based educational opportunities are not directly applicable to the project.**			
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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Policies:			
(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.			✓
(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 Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives related to strengthening social and health services are not directly applicable to the project.**			
Objective:			
(2) Encourage the Federal and State governments and the private sector to improve the quality and delivery of social and healthcare services.			✓
Policies:			
(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.			✓
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(d) Provide heliports countywide for emergency health and safety purposes.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives related to federal, State and private sector involvement to improve quality and delivery of health services are not directly applicable to the project.**			
Objective:			
(3) Strengthen public-awareness programs related to healthy lifestyles and social and medical services.			✓
Policies:			
(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 Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives related to Federal, State and private sector involvement to strengthen public awareness programs related to health and medical services are not applicable to the project.**			
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:			
(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.			✓
(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.	✓		

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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.			✓
Analysis: **The proposed project has a density that provides economies of scale lowering the overall cost of each unit to be able to provide a feasible workforce rental project. Maui has not seen a large-scale rental project built in over a decade that serves low-income, low-moderate income, and moderate-income households which have AMI levels between 80 percent to 140 percent. With the current shortage of overall housing and even a more severe rental shortage, this project comes at a time of great need.**			
Objective:			
(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.	✓		
Policies:			
(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.			✓
Analysis: **The project's location is ideal given its surrounding uses are mostly residential and commercial. Infrastructure is also conveniently located along Ku'ikahi Street and Wai'ale Road making it an ideal location for multi-family rentals to keep the cost of construction economical. The site is within walking distance to neighborhood amenities. The project site plan and unit plans assume a broad tenant mix and household make-up. The project will cater to local families. In an area surrounded by for-sale homes, workforce rentals that cater to a mix of income types and age groups will provide diversity and strengthen the housing infrastructure in the Wailuku region.**			
Objective:			
(3) Increase and maintain the affordable housing inventory.	✓		
Policies:			
(a) Recognize housing as a basic human need, and work to fulfill that need.	✓		

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(b) Prioritize available infrastructure capacity for affordable housing.	✓		
(c) Improve communication, collaboration, and coordination among housing providers and social-service organizations.			✓
(d) Study future projected housing needs, monitor economic cycles, and prepare for future conditions on each island.			✓
(e) Develop public-private and nonprofit partnerships that facilitate the construction of quality affordable housing.			✓
(f) Streamline the review process for high-quality, affordable housing developments that implement the goals, objectives, and policies of the General Plan.			✓
(g) Minimize the intrusion of housing on prime, productive, and potentially productive agricultural lands and regionally valuable agricultural lands.	✓		
(h) Encourage long-term residential use of existing and future housing to meet residential needs.	✓		
Implementing Actions:			
(a) Develop policies to even out the peaks and valleys in Maui County's construction-demand cycles.			✓
Analysis: **The proposed Workforce Apartment Rental Housing Project is consistent and meets the stated goals, objectives, and policies of the Maui County's Countywide Policy Plan. Conformance with the objectives and policies of the Maui County Policy Plan is achieved by the proposed project as it will provide needed housing for Maui's working families. As noted earlier in this report, 60 percent of the total units will be affordable, meeting the needs of families with incomes of 80 percent to 140 percent of Maui's median income, and the remaining 40 percent of the units will be unrestricted and market-priced rentals. The project designed floor plans and elevations are consistent and complimentary to the neighboring residential subdivisions.**			
Objective:			
(4) Expand access to education related to housing options, homeownership, financing, and residential construction.			✓
Policies:			
(a) Broaden access to information about County, State, and Federal programs that provide financial assistance to renters and home buyers.			✓
(b) Expand access to information about opportunities for homeownership and self-help housing.			✓
(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.			✓
(d) Improve home buyers' education on all aspects of homeownership.			✓
Analysis: **Although the proposed project expands housing opportunities for residents, the specific objectives related to expanding access to housing education are not directly relevant to the proposed project.**			
F. STRENGTHEN THE LOCAL ECONOMY			
Goal: Maui County's economy will be diverse, sustainable, and supportive of community values.	✓		
Objective:			
(1) Promote an economic climate that will encourage diversification of the County's economic base and a sustainable rate of economic growth.	✓		
Policies:			
(a) Support economic decisions that create long-term benefits.	✓		

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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 Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units. Implementation of the proposed project will stimulate the construction industry on Maui, of which many companies are locally owned small businesses.**			
Objective:			
(2) Diversify and expand sustainable forms of agriculture and aquaculture.			✓
Policies:			
(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 Hawai'i's economic opportunities in the ecologically sensitive aquaculture industries.			✓
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(j) Encourage healthy and organic farm practices that contribute to land health and regeneration.			✓
(k) Support cooperatives and other types of nontraditional communal farming and 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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives related to economic diversity and expanding the sustainable forms of agriculture are not applicable to the project.**			
Objective:			
(3) Support a visitor industry that respects the resident culture and the environment.			✓
Policies:			
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analysis: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives related to supporting a visitor industry that respects the resident culture are not applicable to the project.**			
Objective:			
(4) Expand economic sectors that increase living-wage job choices and are compatible with community values.	✓		
Policies:			
(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 Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units. Implementation of the proposed project will stimulate the construction industry on Maui, which has good living-wage job choices which are compatible with community values.**			
G. IMPROVE PARKS AND PUBLIC FACILITIES			
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 access to recreational opportunities and community facilities to meet the present and future needs of residents of all ages and physical abilities.			✓
Policies:			
(a) Protect, enhance, and expand access to public shoreline and mountain resources.			✓
(b) Expand and enhance the network of parks, multi-use paths, and bikeways.	✓		
(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 Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units. There are four (4) small park/recreational areas proposed for the project residents.**			

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Objective:			
(2) Improve the quality and adequacy of community facilities.	✓		
Policies:			
(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.			✓
Analysis: **As previously noted, there are four (4) small park/recreational areas proposed for the project residents. These recreational areas will be designed to be safe for the needs of all ages and physical abilities of the project residents, to the extent reasonable.**			
Objective:			
(3) Enhance the funding, management, and planning of public facilities and park lands.			✓
Policies:			
(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 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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units. The objectives related to enhancing funding, management and planning of public facilities and park lands are not applicable to the proposed project.**			
H. DIVERSIFY TRANSPORTATION OPTIONS			
Goal: Maui County will have an efficient, economical, and environmentally sensitive means of moving people and goods.	✓		
Objective:			
(1) Provide an effective, affordable, and convenient ground-transportation system that is environmentally sustainable.			✓
Policies:			
(a) Execute planning strategies to reduce traffic congestion.			✓
(b) Plan for the efficient relocation of roadways for the public benefit.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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 and primary workforce residential areas.			✓
(c) Create attractive, island-appropriate, conveniently located park-and-ride and ride- share facilities.			✓
Analysis: **The proposed project will make specific roadway improvements as determined by the project Traffic Impact Assessment Report and as approved by the Department of Public Works. Such improvements will make adjacent roadways safe and efficient. The proposed project will also make certain pedestrian improvements and a new pedestrian crosswalk across Ku'ikahi Drive to the Kehalani Village Center that will improve public safety in the area.**			
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:			
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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.	✓		
(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.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units in close proximity to commercial centers. The proposed project will also include improvements for pedestrian safety such as walkways and bicycle lanes which will reduce reliance on the automobiles.**			
Objective:			
(3) Improve opportunities for affordable, efficient, safe, and reliable air transportation.			✓
Policies:			
(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.			✓
(g) Encourage the State to provide efficient, adequate, and affordable parking and transit connections within and around airports.			✓
Analysis: **The objectives related to improving opportunities for safe and reliable air transportation are not directly applicable to the proposed project.**			
Objective:			
(4) Improve opportunities for affordable, efficient, safe, and reliable ocean transportation.			✓
Policies:			
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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 Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives related to providing safe marine transportation are not applicable to the project.**			
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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units. A Traffic Impact Assessment Report was carried out for the project. As noted in the report, the project will make certain roadway improvements to mitigate project related traffic impacts.**			
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:			
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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:			
(a) Develop a process to review all applications for desalination.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units. The proposed project will connect to the County water system. Coordination with the County Department of Water Supply indicates that there is capacity in the Central Maui Water System to support the project's water requirements.**			
Objective:			
(2) Improve waste-disposal practices and systems to be efficient, safe, and as environmentally sound as possible.	✓		
Policies:			
(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.			✓
Implementing Actions:			
(a) Establish recycling, trash-separation, and materials recovery programs and facilities to reduce the flow of waste into landfills.	✓		
(b) Study the feasibility of developing environmentally safe waste-to-energy facilities.			✓
(c) Utilize taxes and fees as means to encourage conservation and recycling.			✓
(d) Implement and regularly update the Integrated Solid Waste Management Plan.			✓
(e) Phase out the use of injection wells.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units in proximity to commercial centers. The proposed project will be serviced by the County wastewater system. Private solid waste services will be utilized by the project. The proposed project will encourage diversion of solid waste (i.e. recycling) by residents.**			
Objective:			
(3) Significantly increase the use of renewable and green technologies to promote energy efficiency and energy self-sufficiency.	✓		
Policies:			
(a) Promote the use of locally renewable energy sources, and reward energy efficiency.	✓		
(b) Consider tax incentives and credits for the development of sustainable- and renewable-energy sources.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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 energy 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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units. Coordination has been carried out with Maui Electric Company to explore the potential for photovoltaic energy generation to connect to the island's electrical grid and reduce the use of fossil fuel generated power.**			
Objective:			
(4) Direct growth in a way that makes efficient use of existing infrastructure and to areas where there is available infrastructure capacity.	✓		
Policies:			
(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:			
(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.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units in close proximity to the existing commercial centers of Wailuku and Kahului, and in proximity to existing infrastructure and services which currently have the capacity to service the project in a cost-effective manner.**			

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Objective:			
(5) Improve the planning and management of infrastructure systems.			✓
Policies:			
(a) Provide a reliable and sufficient level of funding to enhance and maintain infrastructure systems.			✓
(b) Require new developments to contribute their pro rata 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.			
(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 Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units in close proximity to the existing commercial centers and in proximity to existing infrastructure and services which can be delivered in a cost effective manner. Coordination with the County indicates there is current capacity in the County water and wastewater systems to service the project. The project site is located within the UGB and does not encourage urban sprawl.**			
J. PROMOTE SUSTAINABLE LAND USE AND GROWTH MANAGEMENT			
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:			
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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 Wailuku Apartment Rental Housing Project involves development of 324 market and affordable multi-family units in an area designated for urban growth by the Wailuku-Kahului Community Plan and the MIP. Compatibility with these plans advances the goal for land use sustainability.**			
Objective:			
(2) Improve planning for and management of agricultural lands and rural areas.			✓
Policies:			
(a) Protect prime, productive, and potentially productive agricultural lands to maintain the islands' agricultural and rural identities and economies.			✓
(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: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units in close proximity to the commercial centers of Wailuku and Kahului. The subject property is located in an area designated for future urban use in the Wailuku-Kahului Community Plan and in the MIP UGB. The objectives related to improving planning for and management of agricultural lands and rural areas are not directly applicable to the proposed project.**			
Objective:			
(3) Design all developments to be in harmony with the environment and to protect each community's sense of place.	✓		
Policies:			

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	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.	✓		
(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: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units in close proximity to the commercial centers. The proposed project reflects the architectural design of the neighboring community. Appropriate pedestrian and bicycle path improvements will be implemented with the project. Four (4) small recreational areas will be provided for residents.**			
Objective:			
(4) Improve and increase efficiency in land use planning and management.	✓		
Policies:			
(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.	✓		

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(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 sunsetting stipulations on development entitlements and their implementation.			✓
Analysis: **An environmental assessment is being carried out for the Wailuku Apartment Rental Housing Project to ensure the proposed action does not have direct, indirect, or cumulative adverse impacts on the environmental resources. The proposed project addresses a significant community need for affordable and market rentals, and is compliant with the General Plan.**			
K. STRIVE FOR GOOD GOVERNANCE			
Objective:			
(1) Strengthen governmental planning, coordination, consensus building, and decision making.			✓
Policies:			
(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 voting in Maui County Council elections.			✓
(d) Study and evaluate the feasibility of authorizing town governments in Maui County.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives related to strengthening governmental planning, coordination, consensus building and decision making are not applicable to the project.**			
Objective:			
(2) Promote civic engagement.			✓
Policies:			

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	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.			✓
(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.			✓
Analysis: **The Wailuku Apartment Rental Housing Project involves the development of 324 market and affordable multi-family units and the objectives related to promoting civic engagement are not applicable to the project.**			
Objective:			
(3) Improve the efficiency, reliability, and transparency of County government's internal processes and decision making.			✓
Policies:			
(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:			
(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.			✓

COUNTYWIDE POLICY PLAN (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Analysis: **The above-noted objectives and policies related to improving the County goverment's internal processes and decision making are not applicable for the proposed project. The project is not a government program or initiative.**			
Objective:			
(4) Adequately fund in order to effectively administer, implement, and enforce the General Plan.			✓
Policies:			
(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 above-noted objectives and policies related to improving the County goverment's internal processes and decision making are not applicable for the proposed project. The project is not a government program or initiative. Nevertheless, the proposed project is in compliance with the Countywide Policy Plan and located within the UGB.**			
Objective:			
(5) Strive for County government to be a role model for implementing cultural and environmental policies and practices.			✓
Policies:			
(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 above-noted objectives and policies related to implementing cultural and environmental policies and practices are not applicable to the proposed project. The project is not a County government program.**			

G. MAUI ISLAND PLAN

The Maui Island Plan (MIP) is applicable to the island of Maui only, providing more specific policy-based strategies for population, land use, transportation, public and community facilities, water and wastewater systems, visitor destinations, urban design, and other matters related to future growth.

As provided by Chapter 2.80B, the MIP shall include the following components:

1. *An island-wide land use strategy, including a managed and directed growth plan*

2. *A water element assessing supply, demand and quality parameters*

3. *A nearshore ecosystem element assessing nearshore waters and requirements for preservation and restoration*

4. *An implementation program which addresses the County's 20-year capital improvement requirements, financial program for implementation, and action implementation schedule*

5. *Milestone indicators designed to measure implementation progress of the MIP*

It is noted that the initial adoption of the MIP via Ordinance No. 4004 did not address the component relating to the implementation program. Chapter 2.80B of the Maui County Code, relating to the General Plan, was amended via Ordinance No. 3979, October 5, 2012, to provide that the implementation program component be adopted no later than one (1) year following the effective date of Ordinance No. 4004. In December 2013 and March 2014, the Council approved time extensions for approval and adoption of the implementation chapter of the MIP. The implementation program component of the MIP was adopted as Ordinance No. 4126 on May 29, 2014.

The MIP addresses a number of planning categories with detailed policy analysis and recommendations which are framed in terms of goals, objectives, policies, and implementing actions. These planning categories address the following areas:

1. *Population*

2. *Heritage Resources*

3. *Natural Hazards*

4. *Economic Development*

5. *Housing*

6. *Infrastructure and Public Facilities*

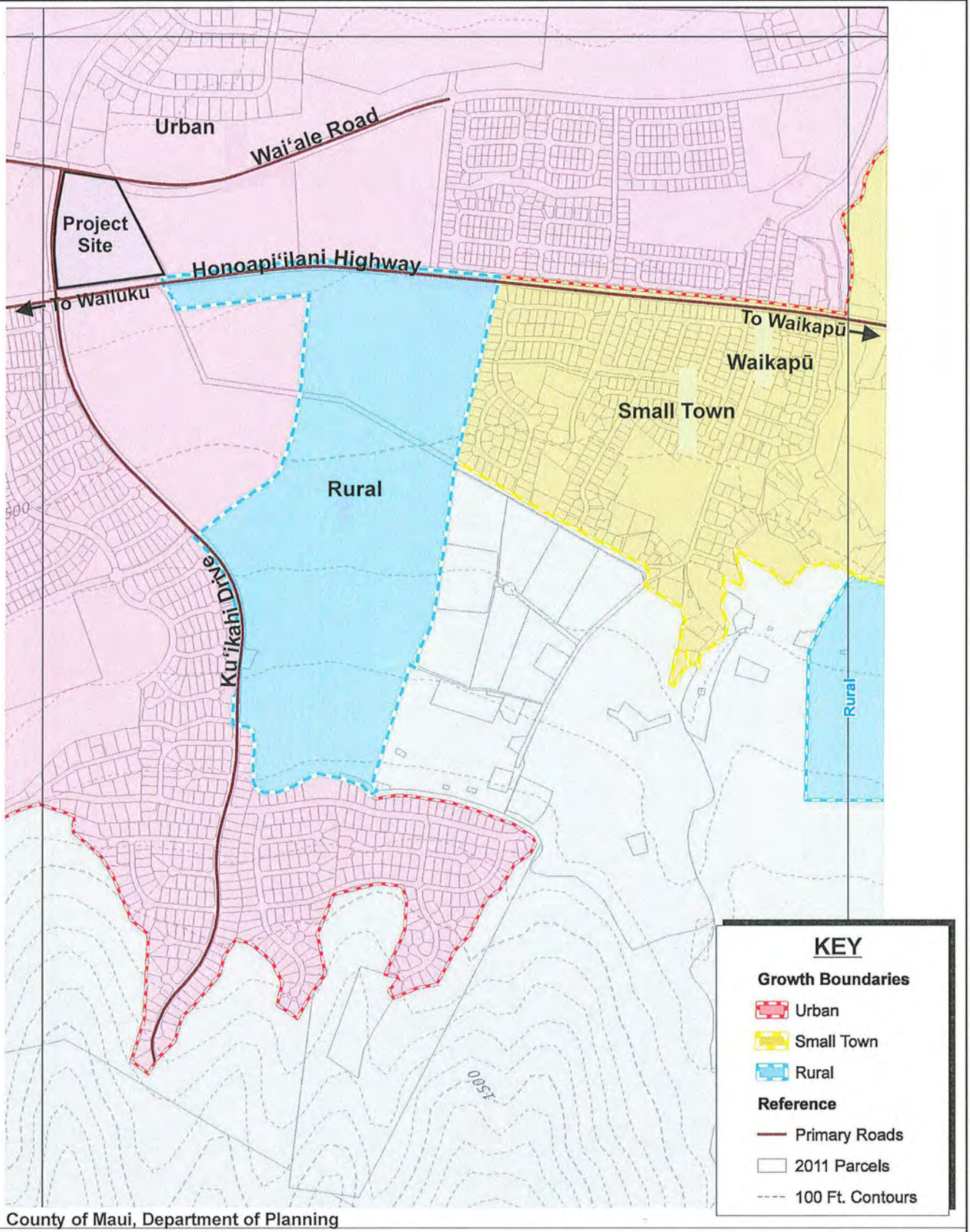
7. *Land Use*

Additionally, an essential element of the MIP is its directed growth plan which provides a management framework for future growth in a manner that is fiscally, environmentally, and culturally prudent. Among the directed growth management tools developed through the

MIP process are maps delineating urban growth boundaries (UGB), small town boundaries and rural growth boundaries. The respective boundaries identify areas appropriate for future growth and their corresponding intent with respect to development character.

The proposed project is located within the UGB of the MIP's Wailuku-Kahului region. See **Figure 20**. It is further designated that the subject property is "Outside of Protected Areas" in the MIP. In this regard, it is consistent with the directed growth strategy defined via growth maps adopted in the MIP.

In addition, the proposed project has been reviewed with respect to pertinent goals, objectives, policies, and implementing actions of the MIP. The analysis is presented in the table below.



Source: County of Maui, Department of Planning

Figure 20

Wailuku Apartment Rental Housing Project

Maui Island Plan Map

1,000 Feet
0 500 2,000

Prepared for: Legacy Wailuku LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Maui Island Plan

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
CHAPTER 1 – POPULATION				
Goal:				
1.1	Maui's people, values, and lifestyles thrive through strong, healthy, and vibrant island communities.	✓		
Objective:				
1.1.1	Greater retention and return of island residents by providing viable work, education, and lifestyle options.	✓		
Policies:				
1.1.1.a	Expand programs that enable the community to meet the education, employment, housing, and social goals of youth and young adults.	✓		
1.1.1.b	Expand housing, transportation, employment, and social opportunities to ensure residents are able to comfortably age within their communities.	✓		
1.1.1.c	Measure and track resident satisfaction through surveys and community indicators.			✓
1.1.1.d	Support funding for transportation, housing, health care, recreation, and social service programs that help those with special needs (including the elderly and disabled).	✓		
Analysis: **The Wailuku Apartment Rental Housing Project provides 324 market and affordable multi-family rental housing in an area that is in close proximity to the job opportunities in the Wailuku and Kahului commercial centers. The proposed project will help to attract and retain island residents by providing quality market and affordable rental housing.**				
CHAPTER 2 – HERITAGE RESOURCES				
CULTURAL, HISTORICAL, AND ARCHAEOLOGICAL RESOURCES ISSUES				
Goal:				
2.1	Our community respects and protects archaeological and cultural resources while perpetuating diverse cultural identities and traditions.	✓		
Objective:				
2.1.1	An island culture and lifestyle that is healthy and vibrant as measured by the ability of residents to live on Maui, access and enjoy the natural environment, and practice Hawaiian customs and traditions in accordance with Article XII, Section 7, Hawai'i State Constitution, and Section 7-1, Hawai`i Revised Statutes (HRS).	✓		
Policies:				
2.1.1.a	Perpetuate the spirit of aloha and celebrate the host Hawaiian culture and other ethnic cultures.			✓
2.1.1.b	Perpetuate a respect for diversity and recognize the broad blending of cultures and ethnicities as vital to the quality of life on Maui.			✓
2.1.1.c	Ensure traditional public access routes, including native Hawaiian trails, are maintained for public use.			✓
2.1.1.d	Support the education of visitors and new residents about the customs and etiquette of the Hawaiian culture, as well as other cultures.			✓
Analysis: **An Archaeological Inventory Survey and Cultural Impact Assessment were carried out for the Wailuku Apartment Rental Housing Project to ensure the proposed action will not adversely impact cultural and historic resources.**				

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
Objective:				
2.2	A more effective and efficient planning and review process that incorporates the best available cultural resources inventory, protection techniques, and preservation strategies.	✓		
Policies:				
2.1.2.a	Ensure that the island has a comprehensive and up-to-date inventory of historic and archaeological resources, and their cultural significance.	✓		
2.1.2.b	Require the update of existing planning and regulatory mechanisms to protect the natural, cultural, scenic, and historic resources within designated Heritage Areas (see Cultural Resources Overlay/Scenic Corridor Protection Technical Reference Map).			✓
2.1.2.c	Ensure that cultural, historic, and archaeological resources are protected for the benefit of present and future generations.	✓		
Objective:				
2.3	Enhance the island's historic, archaeological, and cultural resources.			✓
Policies:				
2.1.3.a	Identify and pursue a listing of the properties and sites on the State and National Register of Historic Places.			✓
2.1.3.b	Support the use of easements, dedications, and other mechanisms to acquire, maintain, and protect lands with cultural, archaeological, and historic significance.			✓
2.1.3.c	Support regulations to require developers, when appropriate, to prepare an Archaeological Inventory Survey, Cultural Impact Assessment, and Ethnographic Inventories that are reviewed and commented upon by the Office of Hawaiian Affairs, Native Hawaiian advisory bodies, the State Historic Preservation Division (SHPD), and the Office of Environmental Quality Control, and systematically comply with the steps listed in SHPD's administrative rules, including consultation and monitoring during construction phases of projects.	✓		
2.1.3.d	Promote the rehabilitation and adaptive reuse of historic sites, buildings, and structures.			✓
2.1.3.e	Encourage property owners to register historic and archaeological sites on the State and National Register.			✓
2.1.3.f	Support opportunities for public involvement with the intent to facilitate the protection and restoration of historic and archeological sites, including consultation with stakeholders.			✓
2.1.3.g	Encourage the resolution of land title questions relating to Land Commission Awards and Royal patents.			✓
2.1.3.h	Ensure compliance with historic preservation laws, and discourage demolition of properties that are determined to be eligible for listing on the National or State Register of Historic Places.	✓		

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Analysis: **As noted above, an Archaeological Inventory Survey and Cultural Impact Assessment were carried out for the Wailuku Apartment Rental Housing Project to ensure the proposed action will not adversely impact cultural and historic resources. An Archaeological Monitoring Report will be carried out for the proposed project and submitted to the State Historic Preservation Division for review and approval prior to any ground disturbing activities to ensure the proposed project will not adversely impact historic and cultural resources. The proposed project will be carried out in compliance with historic preservation laws.**			
SHORELINE, REEFS, AND NEARSHORE WATERS			
Goal:			
2.2 An intact, ecologically functional system of reef, shoreline, and nearshore waters that are protected in perpetuity.			✓
Objective:			
2.2.1 A more comprehensive and community-based CZM program.			✓
Policies:			
2.2.1.a Encourage a management system that protects and temporarily rests the reef ecosystems from overuse.			✓
2.2.1.b Support the establishment of additional MMAs and reef replenishment areas.			✓
2.2.1.c Work with appropriate agencies and community members to protect any special managed conservation areas from overuse and ensure that surrounding land uses do not contribute to the degradation of the natural resources, such as ʻAhihi-Kinaʻu Natural Area Reserve, Honolua-Mokulēʻia Bay Marine Life Conservation District, and Mākena State Park.			✓
2.2.1.d Incorporate the following into the MIP, where consistent with the MIP:			
Beach Management Plan for Maui;			✓
Coastal Nonpoint Pollution Control Program Management Plan;			✓
Implementation Plan for Polluted Runoff Control; and			✓
Ocean Resource Management Plan.			✓
2.2.1.e Support greater coordination among governmental agencies involved with the protection of the island's marine resources.			✓
Objective:			
2.2.2 Improved reef health, coastal water quality, and marine life.			✓
Policies:			
2.2.2.a Create additional mechanisms where needed to contain and control runoff and pollution.			✓
2.2.2.b Allow extraction of high quality, Class A, low silt sands only when they will be used to protect or restore Maui's shorelines and beaches.			✓
2.2.2.c Carefully manage beach nourishment activities to protect the coastal and marine ecosystem.			✓
2.2.2.d Require, where appropriate, a buffer between landscaped areas and the			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
	shoreline, gulches, and streams to reduce the runoff of fertilizers, pesticides, herbicides, and other pollutants into coastal waters.			
2.2.2.e	Strictly regulate shoreline armoring in accordance with adopted Shoreline Rules, with an intent to protect the coastal and marine ecosystem.			✓
2.2.2.f	Support greater protection of Keālia Pond National Wildlife Refuge through the following:			
	(1) Enhancement of marine ecosystems;			✓
	Beach and sand dune restoration; and			✓
	Expansion of habitat for Maui's threatened or endangered sea turtles, birds, and other species.			✓
2.2.2.g	Support the development of regulations to prevent the excessive depletion of fish stocks due to non-sustainable practices and gear such as SCUBA spear-fishing and lay nets, within the context of nearshore ecosystems.			✓
2.2.2.h	Encourage the State to conduct a regular census of fish populations and monitor coral health.			✓
2.2.2.i	Encourage the State to significantly increase the number of park rangers, enforcement officers, and marine biologists to protect coastal resources.			✓
2.2.2.j	Encourage the State to prohibit the collection and exportation of fish, coral, algae, and other marine species for the ornamental and aquarium trade.			✓
Objective:				
2.2.3	Water quality that meets or exceeds State Clean Water Act standards.			✓
Policies:				
2.2.3.a	Reduce the amount of impervious surface and devise site plan standards that aim to minimize storm runoff and NPS pollution.			✓
2.2.3.b	Support the revision of existing regulations to require an Erosion and Sedimentation Control Plan (ESCP) for development activities that may pose a threat to water quality.			✓
2.2.3.c	Require an on-site monitoring program, where applicable, when grading may pose a threat to water quality or when recommended in the ESCP.			✓
2.2.3.d	Avoid development actions that impair Maui's reef systems and remove identified stressors.			✓
2.2.3.e	Phase out cesspools and restrict the use of septic systems in ecologically sensitive coastal areas by converting to environmentally-friendly alternative sewage treatment systems, and connecting to central sewerage systems when and where feasible.			✓
2.2.3.f	Prohibit the development of new wastewater injection wells, except when unavoidable for public health and safety purposes.			✓
2.2.3.g	Ensure that the County upholds its affirmative duty under the Clean Water Act by monitoring and reducing point and NPS pollution to help safeguard coastal waters.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Objective:			
2.2.4 Acquire additional shoreline lands and shoreline access rights.			✓
Policies:			
2.2.4.a Promote the use of conservation easements, land trusts, transfer and purchase of development rights, and mitigation banking.			✓
2.2.4.b Require the dedication of public beach and rocky shoreline access ways to and along the shoreline where it serves a practical public interest as a condition of development or subdivision approval; future subdivisions and developments shall be consistent with and effectuate, to the extent practicable, the Shoreline Access Inventory Update - Final Report (March 2005), and its updates.			✓
2.2.4.c Incorporate the Shoreline Access Inventory Update - Final Report (March 2005), and its regular updates, into this plan.			✓
2.2.4.d Identify access points while further acquiring key shoreline parcels and easement rights to enhance and protect beach access and shoreline recreation.			✓
Analysis: **The Wailuku Apartment Rental Housing Project complies with the objectives of the Coastal Zone Management Program. The propose project is not located in proximity to the shoreline and is not anticipated to adversely impact coastal zone resources. Onsite drainage improvements will be carried out to control stormwater runoff and to ensure the proposed project will not adversely impact adjacent and downstream properties. The proposed project will connect to the County sewer system and the wastewater generated by the project will be appropriately treated.**			
WATERSHEDS, STREAMS, AND WETLANDS ISSUES			
Goal:			
2.3 Healthy watersheds, streams, and riparian environments.			✓
Objective:			
2.3.1 Greater protection and enhancement of watersheds, streams, and riparian environments.			✓
Policies:			
2.3.1.a All present and future watershed management plans shall incorporate concepts of ahupua'a management based on the interconnectedness of upland and coastal ecosystems/species.			✓
2.3.1.b Continue to support and be an active member of watershed partnerships.			✓
2.3.1.c Support the establishment of regional water trusts, composed of public and private members, to manage water resources.			✓
2.3.1.d Support regulations to require developments to utilize ahupua'a management practices.			✓
2.3.1.e Work with private and non-profit entities to educate the public about the connection between upland activities within the watershed and the impacts on nearshore ecosystems and coral reefs.			✓
2.3.1.f Provide adequate funding and staff to develop and implement watershed protection plans and policies, including acquisition and management of watershed resources and land.			✓

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2.3.1.g Encourage the State to mandate instream assessment to provide adequate water for native species.			✓
2.3.1.h Maui will protect all watersheds and streams in a manner that guarantees a healthy, sustainable riparian environment.			✓
Objective:			
2.3.2 Decreased NPS and point source pollution.			✓
Policies:			
2.3.2.a Enforce water pollution related standards and codes.			✓
2.3.2.b Support the use of LID Techniques such as those described in the State of Hawai'i LID Practitioner's Guide (June 2006), as amended.	✓		
2.3.2.c Encourage farmers and ranchers to use agricultural BMPs to address NPS pollution.			✓
Objective:			
2.3.3 Preserve existing wetlands and improve and restore degraded wetlands.			✓
Policies:			
2.3.3.a Prohibit the destruction and degradation of existing upland, mid-elevation, and coastal wetlands.			✓
2.3.3.b Support and fund wetland protection and improvement, and restoration of degraded wetlands.			✓
2.3.3.c Where applicable, require developers to provide a wetland protection buffer and/or other protective measures around and between development and wetland resources.			✓
Objective:			
2.3.4 Greater preservation of native flora and fauna biodiversity to protect native species.			✓
Policies:			
2.3.4.a Work with appropriate agencies to eliminate feral ungulate populations and invasive species.			✓
2.3.4.b Encourage the State to provide adequate funding to preserve biodiversity, protect native species, and contain or eliminate invasive species.			✓
2.3.4.c Support the work of conservation groups and organizations that protect, reestablish, manage, and nurture sensitive ecological areas and threatened indigenous ecosystems.			✓
Objective:			
2.3.5 Limited development in critical watershed areas.			✓
Policies:			
2.3.5.a Discourage development and subdivision of land within critical watersheds and in areas susceptible to high erosion and sediment loss.			✓
2.3.5.b Designate critical watershed areas as conservation lands.			✓

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2.3.5.c Strongly encourage new subdivisions and developments that are proximate to environmentally sensitive watershed resources to prepare and implement CSD plans.			✓
Objective:			
2.3.6 Enhance the vitality and functioning of streams, while balancing the multiple needs of the community.			✓
Policies			
2.3.6.a Protect and enhance natural streambeds and discourage stream alteration.			✓
2.3.6.b Work with appropriate agencies to establish minimum stream flow levels and ensure adequate stream flow to sustain riparian ecosystems, traditional kalo cultivation, and self-sustaining ahupua'a.			✓
2.3.6.c Respect and participate in the resolution of native Hawaiian residual land and water rights issues (kuleana lands, ceded lands, and historic agricultural and gathering rights).			✓
2.3.6.d Ensure that stream flows implement laws and policies found in the State Constitution and Water Code.			✓
2.3.6.e Work with appropriate agencies and stakeholders to establish minimum stream flow levels, promote actions to support riparian habitat and the use of available lo'i, and maintain adequate flows for the production of healthy kalo crops.			✓
Analysis: **The Wailuku Apartment Rental Housing Project is an affordable and market multi-family residential development and the goals and objectives related to watershed, wetlands, and streams issues are not applicable to the project. The proposed project is not located in proximity to any watersheds, wetlands, or streams. Nevertheless, low impact development principles in stormwater management will be utilized to the extent practicable to minimize or avoid adverse impacts to the physical environment.**			
WILDLIFE AND NATURAL AREAS			
Goal:			
2.4 Maui's natural areas and indigenous flora and fauna will be protected.	✓		
Objective:			
2.4.1 A comprehensive management strategy that includes further identification, protection, and restoration of indigenous wildlife habitats.			✓
Policies:			
2.4.1.a Identify and inventory the following:			
(2) Natural, recreational, and open space resources;			✓
Flora and fauna with medium, high, and very high concentrations of threatened or endangered species; and			✓
Location and extent of invasive species.			✓
2.4.1.b Require flora and fauna assessment and protection plans for development in areas with concentrations of indigenous flora and fauna; development shall comply with the assessment and protection plan and shall use the avoidance, minimization, and mitigation approach respectively, with an emphasis on avoidance.			✓

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2.4.1.c Support the implementation of Hawai`i's Comprehensive Wildlife Conservation Strategy (October 2005).			✓
Objective:			
2.4.2 A decrease in invasive species through programs and partnerships that eradicate undesirable species and protect native habitat.			✓
Policies:			
2.4.2.a Prevent the introduction of invasive species at all of Maui's airports and harbors.			✓
2.4.2.b Encourage the State to increase funding in support of invasive species interception, control, and eradication.			✓
2.4.2.c Encourage the State to develop programs that allow students to participate in invasive species eradication projects.			✓
Objective:			
2.4.3 Greater protection of sensitive lands, indigenous habitat, and native flora and fauna.			✓
Policies:			
2.4.3.a Secure an interconnected network of sensitive lands, greenways, watercourses, and habitats.			✓
2.4.3.b Protect Maui's sensitive lands (see Sensitive Lands on Protected Areas Diagrams).			✓
2.4.3.c Promote innovative environmental-planning methods and site-planning standards that preserve and re-establish indigenous flora and fauna habitat, to preserve and restore connected habitat corridors and open space.	✓		
2.4.3.d Utilize protection tools such as conservation easements, land trusts, land banks, Purchase of Developments Rights (PDRs), Transfer of Development Rights (TDRs), and other stewardship tools to acquire natural areas			✓
2.4.3.e Encourage discussions with communities to designate heritage areas that protect recreational and cultural lifestyles and resources.			✓
2.4.3.f Support the expansion of Haleakalā National Park, and the creation of new national parks, where appropriate and supported by local communities.			✓
2.4.3.g Encourage reforestation efforts that increase native species' habitat.			✓
2.4.3.h Utilize the Natural Area Partnership Program (NAPP) and other programs to protect natural lands.			✓
2.4.3.i Support increased dedicated funding for the acquisition, protection, restoration, or preservation of important natural areas or open space through the following: grants from the Land and Water Conservation Fund; dedicated funding from real property taxes or other appropriate revenues; bond issues; real estate transfer tax; revenues from the Transient Accommodations Tax; development mitigation fees; and other appropriate funding sources.			✓
Analysis: **A biological resources assessment was carried out for the Wailuku Apartment Rental Housing Project to ensure the proposed project will not adversely impact rare, threatened and endangered flora and fauna resources. The proposed landscape plan for the project will, to the extent practicable, incorporate drought tolerant and native species.**			

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SCENIC RESOURCES				
Goal:				
2.5	Maui will continue to be a beautiful island steeped in coastal, mountain, open space, and historically significant views that are preserved to enrich the residents' quality of life, attract visitors, provide a connection to the past, and promote a sense of place.	✓		
Objective:				
2.5.1	A greater level of protection for scenic resources.	✓		
Policies:				
2.5.1.a	Protect views to include, but not be limited to, Haleakalā, ʻĪao Valley, the Mauna Kahalawai (West Maui Mountains), Puʻu Ōʻlaʻi, Kahoʻolawe, Molokini, Molokaʻi, and Lānaʻi, Mauna Kea, Mauna Loa, sea stacks, the Pacific Ocean, and significant water features, ridgelines, and landforms.	✓		
2.5.1.b	Identify, preserve, and provide ongoing management of important scenic vistas and open space resources, including mauka-to-makai and makai-to-mauka view planes.			✓
2.5.1.c	Protect "night sky" resources by encouraging the implementation of ambient light ordinances and encouraging conversion of all sources that create excessive light pollution, affecting our ability to view the stars.	✓		
2.5.1.d	Protect ridgelines from development where practicable to facilitate the protection of public views.			✓
2.5.1.e	Protect scenic resources along Maui's scenic roadway corridors.			✓
Objective:				
2.5.2.	Reduce impacts of development projects and public-utility improvements on scenic resources.			✓
Policies:				
2.5.2.a	Enforce the policies and guidelines of the SMA regarding the protection of views.			✓
2.5.2.b	Require any new subdivision of land, development, or redevelopment adjacent to a "high" or "exceptional" scenic corridor to submit an impact assessment of the project's scenic impacts; this assessment shall use the avoidance, minimization, and mitigation steps respectively, with an emphasis on avoidance.	✓		
2.5.2.c	Require appropriate building setbacks and limits on wall heights to protect views along scenic corridors.	✓		
2.5.2.d	Encourage the State of Hawai`i Board of Land and Natural Resources to deny any development within the State Conservation District that interferes with a scenic landscape or disrupts important open space resources.			✓
2.5.2.e	Require Urban Design and Review Board (UDRB) review and approval of utility poles, facilities, and other visible infrastructure improvements along scenic corridors.			✓

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2.5.2.f Ensure little or no effect on scenic resources from utility improvements, primarily power poles.			✓
2.5.2.g Protect scenic vistas from intrusion by power poles.			✓
Objective:			
2.5.3 Greater protection of and access to scenic vistas, access points, and scenic lookout points.			✓
Policy:			
2.5.3.a Protect, enhance, and acquire access to Maui's scenic vistas and resources.			✓
Analysis: **A view analysis has been carried out to ensure the Wailuku Apartment Rental Housing Project will not adversely impact scenic vistas and views from public access points. Appropriate building setbacks and wall heights have been established as required to maintain views along the public roadways. All outdoor project lighting will be shielded and down directed to protect Maui's night sky and comply with the existing County Outdoor Lighting Ordinance.**			
CHAPTER 3 – NATURAL HAZARDS			
Goal:			
3.1 Maui will be disaster resilient.			✓
Objective:			
3.1.1 Increased inter-agency coordination.			✓
Policy:			
3.1.1.a Reinforce the island's preparedness capacity by:			
(3) Applying the latest data-gathering techniques/technology;			✓
Pursuing funding opportunities;			✓
Improving monitoring and advance warning systems;			✓
Fostering public awareness; and			✓
Working with external agencies to coordinate disaster mitigation and response.			✓
Objective:			
3.1.2 Greater protection of life and property.			✓
Policies:			
3.1.2.a Identify critical infrastructure, lifelines, roads, and populations that are vulnerable to coastal hazards, and encourage strategic retreat and relocation to safer areas.			✓
3.1.2.b Consider the location of dams, reservoirs, holding ponds, and other water-containing entities that are upstream of inhabited areas to anticipate, avoid, and mitigate inundation risks, and discourage new development in areas where possible inundation hazards may exist.			✓

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3.1.2.c Strengthen current development standards to minimize destruction of land and property.			✓
3.1.2.d Encourage the use of construction techniques that reduce the potential for damage from natural hazards.			✓
3.1.2.e Increase the County's resilience to drought.			✓
3.1.2.f Increase food and energy security through local production and storage.			✓
Objective:			
3.1.3 A more coordinated emergency response system that includes clearly defined and mapped evacuation routes.			✓
Policy:			
3.1.3.a Identify and expand shelter facilities and evacuation routes away from areas susceptible to natural hazards.			✓
Objective:			
3.1.4 A more educated and involved public that is aware of and prepared for natural hazards.			✓
Policies:			
3.1.4.a Promote public education and involvement related to natural hazards awareness and preparedness.			✓
3.1.4.b Coordinate a multi-agency effort to establish and promote a comprehensive public education program that will focus on practical approaches to preparedness, damage prevention, and hazard mitigation.			✓
Analysis: **The Wailuku Apartment Rental Housing Project is an affordable and market multi-family residential development and the MIP goal, objectives, and policies related to Natural Hazards are not applicable to the project.**			
CHAPTER 4 – ECONOMIC DEVELOPMENT			
ECONOMIC DIVERSIFICATION			
Goal:			
4.1 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:			
4.1.1 A more diversified economy.			✓
Policies:			
4.1.1.a Encourage an economy that is driven by innovation, research and development, and human resource development, including but not limited to, increasing technology- and knowledge-based sectors to be a major component in Maui County's economic base.			✓
4.1.1.b Support the creation of new jobs and industries that provide a living wage.			✓
4.1.1.c Facilitate and expedite permits and approvals.			✓

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4.1.1.d Develop linkages and partnerships among international research and development activities and Maui businesses.			✓
Objective:			
4.1.2 Increase activities that support principles of sustainability.			✓
Policies:			
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 Substitute imports with locally-produced services and products where practicable.			✓
4.1.2.d Support the development of economic development clusters in targeted industry sectors.			✓
4.1.2.e Encourage all businesses to save energy, water, and other resources.			✓
Objective:			
4.1.3 Improve the island's business climate.	✓		
Policies:			
4.1.3.a Upgrade, maintain the quality of, 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. Support flexibility in workforce policies compatible with business and quality of life goals.			✓
4.1.3.f Assist community development organizations with revitalization and development of neighborhoods and communities that are attractive to the workforce of a diversified economy.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides 324 affordable and market multi-family residential units in close proximity to the Wailuku and Kahului commercial centers. The proposed project is located in diversified and attractive environs characterized by single-family, multi-family and commercial commercial properties located in the nearby master planned communities of Kehalani and Maui Lani Project Districts and the historic center of Wailuku Town. Construction of the project will support the local economy.**			

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TOURISM				
Goal:				
4.2	A healthy visitor industry that provides economic well-being with stable and diverse employment opportunities.			✓
Objective:				
4.2.1	Increase the economic contribution of the visitor industry to the island's environmental well-being for the island's residents' quality of life.			✓
Policies:				
4.2.1.a	Engage the visitor industry in the growth of emerging sectors where practicable.			✓
4.2.1.b	Support the implementation of the Maui County TSP, when consistent with the MIP.			✓
4.2.1.c	Focus economic growth in the visitor industry through enhanced visitor experiences and an emphasis on attracting higher-spending.			✓
4.2.1.d	Provide a rich visitor experience, while protecting the island's natural beauty, culture, lifestyles, and aloha spirit.			✓
4.2.1.e	Diversify the tourism industry by supporting appropriate niche activities such as ecotourism, cultural tourism, voluntourism, ag-tourism, health and wellness tourism, educational tourism, medical tourism, and other viable tourism-related businesses in appropriate locations.			✓
4.2.1.f	Recognize the important economic contributions that the visitor industry makes and support a healthy and vibrant visitor industry.			✓
4.2.1.g	Support the increased availability of kama'āina discount programs.			✓
Objective:				
4.2.2	Comprehensively manage future visitor-unit expansion.			✓
Policies:				
4.2.2.a	Mitigate the impact of tourism on the host culture, natural environment, and resident lifestyles.			✓
4.2.2.b	Allow, where permitted by the community plan, the development of business hotels and small, sensitively-designed inns.			✓
4.2.2.c	Manage impacts from transient vacation rentals, hotels, bed and breakfast units, timeshares, and resort condominiums on residential communities, public infrastructure, and community facilities.			✓
4.2.2.d	Discourage supplanting of existing island housing to visitor accommodations that may have a negative impact on long-term rental housing, price of housing, and price of land.			✓
4.2.2.e	Allow the designation of retreat/mini-conference centers in appropriate locations through the community plan process.			✓
4.2.2.f	Community plans should consider establishing standards such as limits on building size, room count, and the number of inns, if any, that will be allowed in small towns.			✓

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Objective:			
4.2.3 Maximize residents' benefits from the visitor industry.			✓
Policies:			
4.2.3.a Promote a desirable island population by striving to not exceed an island-wide visitor population of roughly 33 percent of the resident population.			✓
4.2.3.b Use the required General Plan Annual Status Report to monitor trends related to residents and visitors.			✓
Analysis: **The above-noted objectives and policies are not applicable for the proposed Wailuku Apartment Rental Housing Project. The project is involved in providing accessible and quality affordable and market housing and not applicable to the MIP's goal, objectives and policies related to tourism.**			
AGRICULTURE			
Goal:			
4.3 Maui will have a diversified agricultural industry contributing to greater economic, food, and energy security and prosperity.			✓
Objective:			
4.3.1 Strive for at least 85 percent of locally-consumed fruits and vegetables and 30 percent of all other locally-consumed foods to be grown in-State.			✓
Policies:			
4.3.1.a Strive to substitute food/agricultural product imports with a reliable supply of locally produced food and agricultural products.			✓
4.3.1.b Facilitate and support the direct marketing/sale of the island's agricultural products to local consumers, through farmers markets and similar venues.			✓
4.3.1.c Encourage growing a diverse variety of crops and livestock to ensure the stewardship of our land while safeguarding consumer safety.			✓
4.3.1.d Work with the State to regulate and monitor genetically-modified-organism (GMO) crops to ensure the safety of all crops and label all GMO products.			✓
Objective:			
4.3.2 Maintain or increase agriculture's share of the total island economy.			✓
Policies:			
4.3.2.a Encourage the export of the island's agricultural products to offshore markets.			✓
4.3.2.b Support infrastructure investments at harbors, such as ferry service, airports, and other facilities for the rapid and cost-effective export of island-grown products.			✓
4.3.2.c Encourage the continued viability of sugar cane production, or other agricultural crops, in central Maui and all of Maui Island.			✓
4.3.2.d Work with the State to reduce excise taxes for commercial agricultural products produced within the State.			✓
4.3.2.e Coordinate with appropriate State and Federal Departments and agencies, private shipping companies, and farmers associations to assist in the rapid and cost-effective export of Maui's agricultural products to off-island markets.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Objective:			
4.3.3 Expand diversified agriculture production at an average annual rate of 4 percent.			✓
Policies:			
4.3.3.a Promote the development of locally-grown and ecologically-sound biofuels, aquaculture, and forest products.			✓
4.3.3.b Support the development of farming associations/cooperatives.			✓
4.3.3.c Work with educational institutions and appropriate agencies to provide education and training for farm owners and entrepreneurs.			✓
Analysis: **The above noted objectives and policies are not applicable for the proposed Wailuku Apartment Rental Housing Project. The project is involved in providing accessible and quality affordable and market housing and not applicable to the MIP's goal, objectives and policies related to agriculture.**			
EMERGING SECTORS			
Goal:			
4.4 A diverse array of emerging economic sectors.			✓
Objective:			
4.4.1 Support increased investment and expanded activity in emerging industries.			✓
Policies:			
4.4.1.a Support the development of and access to state-of-the-art voice, video, and data telecommunications systems and high-speed Internet.			✓
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, space technologies, 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 a sustainable, culturally sensitive, astronomy industry.			✓
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.			✓
4.4.1.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.			✓
Objective:			
4.4.2 Increase the development of renewable energy technologies that are supported by the local community.			✓

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Policies:				
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.			✓
4.4.2.c	Ensure an adequate supply of land and facilitate permitting to meet the needs for renewable energy technologies such as solar, wind, wave, biofuel, and other technologies, provided that environmental, view plane, and cultural impacts are addressed.			✓
4.4.2.d	Support the Maui County Energy Alliance Plan where consistent with the MIP.			✓
Analysis: **The above-noted objectives and policies are not applicable for the proposed Wailuku Apartment Rental Housing Project. The project will provide accessible and quality affordable and market housing. The proposed project will generate substantial economic activity in the construction sector during project implementation. However, the economic impact of the proposed project may not directly apply to the MIP's goal, objectives and policies related to emerging economic sectors.**				
SMALL BUSINESS DEVELOPMENT				
Goal:				
4.5	Small businesses will play a key role in Maui's economy.	✓		
Objective:				
4.5.1	Increase the number of and revenue generated by small businesses and decrease the percentage of small business failures.	✓		
Policies:				
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.			✓
4.5.1.b	Assist traditional "mom and pop" business establishments.	✓		
4.5.1.c	Reduce barriers to small business development.			✓
4.5.1.d	Require, where feasible, the government procurement of goods and services from locally-owned, small businesses.			✓
4.5.1.e	Support community markets and venues that sell locally-made produce, goods, and services.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project will generate employment in the construction industry. Many of the businesses in the construction industry are classified as small businesses and run as "mom and pop" enterprises. The proposed project will benefit and support local small businesses in the construction and related business sector.**				

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HEALTH CARE SECTOR			
Goal:			
4.6 Maui will have a health care industry and options that broaden career opportunities that are reliable, efficient, and provide social well-being.			✓
Objective:			
4.6.1 Expand the economic benefits of the health care sector.			✓
Policies:			
4.6.1.a Encourage expanded services at MMMC and at other medical facilities.			✓
4.6.1.b Support expansion of federally qualified health centers with the direct involvement of the residents of the communities served.			✓
4.6.1.c Support the use of multimedia as a means to provide healthcare information.			✓
4.6.1.d Encourage digitalization of all diagnostic equipment at all facilities on Maui to enable sharing of data and more efficient use of limited provider workforce, consistent with data protection and patient privacy.			✓
4.6.1.e Support the expansion of telemedicine.			✓
4.6.1.f Encourage expansion and improved access to emergency care in all communities.			✓
Objective:			
4.6.2 Be more efficient in the delivery of health care services and in minimizing health care costs.			✓
Policies:			
4.6.2.a Support expansion of health care providers and facilities to improve access to quality care throughout the island.			✓
4.6.2.b Encourage the expansion of veteran health care services.			
4.6.2.c Allow home-based out-patient medical care that does not interfere with surrounding neighborhoods.			✓
Objective:			
4.6.3. Expand Maui's alternative health care services, including spiritual practices.			✓
Policies:			
4.6.3.a Support efforts to promote alternative medicine.			✓
4.6.3.b Allow small-scale home-alternative medicine businesses such as massage, chiropractic care, traditional Hawaiian healing, and acupuncture that do not interfere with surrounding neighborhoods.			✓
Analysis: **The above-noted objectives and policies are not applicable for the proposed Wailuku Apartment Rental Housing Project. The project is involved in providing adequate and accessible market and affordable housing in close proximity to the Wailuku and Kahului commercial centers. The project is not a social services, cultural, and government-funded program and the MIP's goal, objectives and policies related to health care services are not applicable to the project.**			

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EDUCATION AND WORKFORCE DEVELOPMENT				
Goal:				
4.7	Maui will have effective education and workforce development programs and initiatives that are aligned with economic development goals.			✓
Objective:				
4.7.1	Improve preschool and K-12 education to allow our youth to develop the skills needed to successfully navigate the 21st century.			✓
Objective:				
4.7.1.a	Encourage the State to implement programs such as:			✓
	(4) Universally available preschool for children between the ages of one and five;			✓
	Mandatory kindergarten;			✓
	Mandatory K-5th grade classroom size limits of 1 teacher to 20 students;			✓
	Mandatory nutrition programs; and			✓
	Mandatory Native Hawaiian programs at all grade levels.			✓
4.7.1.b	Encourage the DOE to extend the school day by at least an hour.			✓
4.7.1.c	Encourage the State to increase funding for public education so that Hawai'i is among the top 10 states nationally as measured by investment per pupil.			✓
4.7.1.d	Encourage the State to ensure teacher certifications relate to effective delivery and improved student performances, and develop an industry experience/equivalency certification to assure our DOE students have access to career technical education and training.			✓
4.7.1.e	Encourage the UHMC to provide dormitory space for high school students.			✓
4.7.1.f	Encourage the development and implementation of curriculum on native Hawaiian history, culture, and practices, in consultation with native Hawaiian groups and associations.			✓
Objective:				
4.7.2	Encourage an increase in the number of certificate recipients and associate, bachelors, and graduate degrees conferred.			✓
Policies:				
4.7.2.a	Encourage the State to increase the number of articulation agreements between the UHMC and four-year universities, particularly the University of Hawai'i at Manoa.			✓
4.7.2.b	Encourage the State to expand accredited 2-year, 4-year, and graduate programs through the UHMC.			✓
4.7.2.c	Encourage the education and training of our residents to meet the needs of a diversified economy.			✓

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4.7.2.d	Support education and training programs such as student internships, vocational training, and career development opportunities to ensure a highly skilled workforce			✓
4.7.2.e	Work with educational institutions to improve and expand access to education and training through multiple modes, including distance learning.			✓
Objective:				
4.7.3	Strive to ensure that more of Maui's jobs are developed in STEM-related sectors by 2030.			✓
Policies:				
4.7.3.a	Support the development of STEM-related certificates and degrees at the two- and four year levels.			✓
4.7.3.b	Support the education initiatives of the Maui Agricultural Development Plan.			✓
4.7.3.c	Expand and seek funding for internships, mentoring, job shadowing, etc. to foster interest in health and green workforce careers.			✓
4.7.3.d	Work with MEDB, UHMC, and other similar organizations to expand internship/education programs to support STEM careers.			✓
4.7.3.e	Continue to partner with the MEDB and other similar organizations to recruit, assist, and retain emerging industries, research and development activities, and educational/workforce opportunities.			✓
Analysis: **The above noted objectives and policies are not applicable for the proposed Wailuku Apartment Rental Housing Project. The project is not directly related to the MIP goal, objectives and policies related to education and workforce development.**				
CHAPTER 5 – HOUSING				
Goal:				
5.1	Maui will have safe, decent, appropriate, and affordable housing for all residents developed in a way that contributes to strong neighborhoods and a thriving island community.	✓		
Objective:				
5.1.1	More livable communities that provide for a mix of housing types, land uses, income levels, and age.	✓		
Policies:				
5.1.1.a	Promote livable communities (compact/walkable/bikeable, access to transit) that provide for a mix of housing types and land uses, including parks, open space, and recreational areas.	✓		
5.1.1.b	Promote planning approaches that provide a mix of multifamily and single-family housing units to expand housing choices.	✓		
5.1.1.c	Discourage gated communities.	✓		
5.1.1.d	Provide incentives for the rehabilitation or adaptive reuse of historic structures to facilitate more housing choices.			✓
5.1.1.e	Use planning and regulatory approaches to provide higher housing densities.	✓		

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Objective:			
5.1.2 Better monitoring, evaluation, and refinement of affordable housing policy in conjunction with the economic cycle.			✓
Policies:			
5.1.2.a Improve data on resident and nonresident housing.	✓		
5.1.2.b Utilize the following approaches to promote resident housing and to minimize offshore market impacts:			
(5) Ensure that the future housing stock is composed of a mix of housing types (multifamily, small lots, ohana units, co-housing, cottage houses, etc.);	✓		
Encourage new housing in proximity to jobs and services, in places that are conducive/affordable to island residents; and	✓		
Explore taxation alternatives and building fee structures.			✓
Objective:			
5.1.3 Provide affordable housing, rental or in fee, to the broad spectrum of our island community.	✓		
Policies:			
5.1.3.a Consider regulations that can help keep affordable housing available at affordable rents.			✓
5.1.3.b Seek to have ownership of affordable for-sale and rental housing vested in a non-profit community land trust, or other qualified housing provider, committed to keeping such housing affordable in perpetuity.			✓
5.1.3.c Facilitate the use of public lands in urban areas that are suitable for affordable housing.			✓
5.1.3.d Develop or support partnerships and initiatives that provide housing-related education/outreach.			✓
5.1.3.e Support the continuing efforts of the County and its community partners to:			
(6) Disseminate information on different housing/financial assistance programs (loans, grants, etc.) including information on housing rehabilitation/restoration/adaptive reuse;			✓
Provide housing-related counseling including budget, credit, and financial planning assistance; and			✓
Create and maintain a comprehensive/master list of available affordable housing to help residents secure a unit that satisfies their need.			✓
Objective:			
5.1.4 Provide infrastructure in a more timely manner to support the development of affordable housing.	✓		
Policies:			
5.1.4.a Prioritize the development of infrastructure that supports the development of affordable housing.	✓		
5.1.4.b Utilize appropriate financing approaches and assistance tools to encourage the development of infrastructure and public facilities.			✓

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5.1.4.c Tailor infrastructure requirements to correspond with appropriate level-of-service standards to help control housing costs and to maintain safety.	✓		
Objective:			
5.1.5 A wider range of affordable housing options and programs for those with special needs.			✓
Policies:			
5.1.5.a Ensure that residents with special needs have access to appropriate housing.			✓
5.1.5.b Encourage housing to be built or rehabilitated to allow the elderly and those with special needs to live in their homes.			✓
5.1.5.c Ensure and facilitate programs to assist those with special needs from becoming homeless.			✓
5.1.5.d Promote programs that stimulate the production of sustainable homeless shelters and alternative housing technologies.			✓
5.1.5.e Support programs that offer home modification counseling on low-interest retrofit loans and grants to those with special needs.			✓
Objective:			
5.1.6 Reduce the cost to developers of providing housing that is affordable to families with household incomes 160 percent and below of annual median income.	✓		
Policies:			
5.1.6.a Support fast-track processing procedures for the following housing-related entitlements: affordable housing projects/units; indigenous Hawaiian housing/units; and special-needs housing units (seniors, disabled, homeless, etc.).	✓		
5.1.6.b Require the construction of affordable for-sale and rental housing units as part of the construction of new housing developments.	✓		
5.1.6.c Offer extra incentives in boom periods and withdraw incentives during slack periods.			✓
Objective:			
5.1.7 Increased preservation and promotion of indigenous Hawaiian housing and architecture.			✓
Policies:			
5.1.7.a Preserve, promote, and give priority to Hawaiian housing/architecture forms to preserve Hawaiian culture.			✓
5.1.7.b Provide for indigenous architecture as an allowable structure for native Hawaiian uses to include hula and lā'au lapa'au.			✓
Analysis: **The proposed Wailuku Apartment Rental Housing Project will help to meet the housing needs of Maui's residents and will increase apartment rental opportunities for Maui's workforce. About 40 percent of Maui's demand for housing are renters. The proposed project will provide the opportunity for 324 households to be able to rent a quality unit with amenities compared to the current rental stock which is a few decades old. The project will also be offering a broad range of unit sizes from studios, 1-, 2-, and 3 bedrooms to accommodate small to large**			

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households. The unit size ranges approximately from 400-935 sf. The project will align with HHFDC income distribution requirements, 195 units will be offered at affordable median income levels with the remaining 129 units at market-priced rent. The proposed project will be seeking certain relief from zoning and building standards in order to reduce overall project costs and enable the project to meet the affordable income benchmarks and rents, and still remain a viable project.			
CHAPTER 6 – INFRASTRUCTURE AND PUBLIC FACILITES			
SOLID WASTE			
Goal:			
6.1 Maui will have implemented the ISWMP thereby diverting waste from its landfills, extending their capacities.	✓		
Objective:			
6.1.1 Meet our future solid waste needs with a more comprehensive planning and management strategy.			✓
Policies:			
6.1.1.a Update and publicize the ISWMP every ten years.			✓
6.1.1.b Strengthen inter-agency coordination including Planning and Environmental Management departments.			✓
6.1.1.c Divert waste from the landfills and educate the public about the recommendations of the ISWMP.	✓		
6.1.1.d Minimize future active, unlined landfill cells to the extent feasible.			✓
Objective:			
6.1.2 Divert at least 60 percent of solid waste from the island's landfills.	✓		
Policies:			
6.1.2.a Require residents and commercial enterprises that generate waste to pay a fair proportion of disposal costs.	✓		
6.1.2.b Encourage environmentally safe waste-to-energy solutions.			✓
6.1.2.c Facilitate the reduction of solid waste generated by packaging, food service products, construction waste, etc.			✓
6.1.2.d Educate residents and visitors about the impacts of and methods to reduce, reuse, and recycle.	✓		
6.1.2.e Discourage the disposal of landfill leachate by diversion to wastewater treatment plants, where practicable.			✓
Analysis: **Solid waste generated by the project during construction will be recycled to the extent possible and disposed at appropriately permitted waste disposal sites. A solid waste management plan will be developed for the disposal of any construction materials during the development of the proposed project. Solid residential waste will be directed to the County landfill. Once completed, landscape greenwaste will be composted.**			

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WASTEWATER				
Goal:				
6.2	Maui will have wastewater systems that comply with or exceed State and Federal regulations; meet levels-of-service needs; provide adequate capacity to accommodate projected demand; ensure efficient, effective, and environmentally sensitive operation; and maximize wastewater reuse where feasible.			✓
Objective:				
6.2.1	A wastewater planning program capable of efficiently providing timely and adequate capacity to service projected demand where economically feasible and practicable.			✓
Policies:				
6.2.1.a	Encourage the use of renewable energy in support of wastewater treatment facilities.			✓
6.2.1.b	Focus the expansion of wastewater systems to accommodate planned growth consistent with the MIP Directed Growth Strategy.			✓
6.2.1.c	Establish new wastewater treatment plant(s) outside the tsunami zone.			✓
Objective:				
6.2.2	Adequate levels of wastewater service with minimal environmental impacts.	✓		
Policies:				
6.2.2.a	Meet or exceed all State and Federal standards regulating wastewater disposal or reuse.			✓
6.2.2.b	Encourage tertiary treatment for all municipal wastewater that is disposed through deep injection wells. Phase out all municipal and private injection wells in coordination with water reuse programs, where feasible, by 2020.			✓
6.2.2.c	Improve and upgrade the County's existing wastewater collection, treatment, and reuse facilities consistent with current and future plans and the County's CIP.			✓
6.2.2.d	Maintain an ongoing sewer inspection program for public and private multi-user systems to identify potential problems and forecast each system's residual life.			✓
6.2.2.e	Require all new developments to fund system improvements in proportion to the development impact and in accordance with the County's wastewater functional plan.	✓		
6.2.2.f	Require appropriate funding mechanisms, such as a sinking fund, to adequately maintain or replace aging water-system components.			✓
6.2.2.g	Strongly encourage the phase out of cesspools.			✓
Objective:				
6.2.3	Increase the reuse of wastewater.			✓

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Policies:				
6.2.3.a	Strengthen coordination between the Department of Water Supply (DWS) and the WWRD to promote reuse/recycling of wastewater.	✓		
6.2.3.b	Expand the reuse of wastewater from the Central Maui, Kīhei, Lahaina, and other wastewater systems.			✓
Analysis: **The subject property is serviced by the County wastewater system. The proposed project will connect to the County sewer system with treatment provided by the Wailuku-Kahului Wastewater Treatment Facility. The proposed project is located in the Wailuku UGB and is supportive of expansion of wastewater facilities to accommodate future growth as envisioned in the MIP growth strategy.**				
WATER				
Goal:				
6.3	Maui will have an environmentally sustainable, reliable, safe, and efficient water system.			✓
Objective:				
6.3.1	More comprehensive approach to water resources planning to effectively protect, recharge, and manage water resources including watersheds, groundwater, streams, and aquifers.			✓
Policies:				
6.3.1.a	Ensure that DWS actions reflect its public trust responsibilities toward water.			✓
6.3.1.b	Ensure the WUDP implements the State Water Code and MIP's goals, objectives, and policies.			✓
6.3.1.c	Regularly update the WUDP, to maintain compliance with the General Plan.			✓
6.3.1.d	Ensure that the County's CIP for water-source development is consistent with the WUDP and the MIP.			✓
6.3.1.e	Where desirable, retain and expand public ownership and management of watersheds and fresh-water systems.			✓
6.3.1.f	Encourage and improve data exchange and coordination among Federal, State, County, and private land use planning and water resource management agencies.			✓
Objective:				
6.3.2	Increase the efficiency and capacity of the water systems in striving to meet the needs and balance the island's water needs.			✓
Policies:				
6.3.2.a	Ensure the efficiency of all water system elements including well and stream intakes, water catchment, transmission lines, reservoirs, and all other system infrastructure.			✓
6.3.2.b	Encourage increased education about and use of private catchment systems where practicable for nonpotable uses.			✓
6.3.2.c	Maximize the efficient use of reclaimed wastewater to serve nonpotable needs.			✓

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6.3.2.d Work with appropriate State and County agencies to achieve a balance in resolving the needs of water users in keeping with the water allocation priorities of the MIP.			✓
6.3.2.e Ensure water conservation through education, incentives, and regulations.	✓		
6.3.2.f Acquire and develop additional sources of potable water.			✓
Objective:			
6.3 Improve water quality and the monitoring of public and private water systems.			✓
Policy:			
6.3.3.a Protect and maintain water delivery systems.			✓
Analysis: **Coordination with the County indicates that currently there is capacity in the County water system to service the project. The proposed project will promote water conservation measures and programs to ensure the County water resources are not adversely impacted.**			
TRANSPORTATION			
Goal:			
6.4 An interconnected, efficient, and well-maintained, multimodal transportation system.			✓
Objective:			
6.4.1 Provide for a more integrated island-wide transportation and land use planning program that reduces congestion and promotes more efficient (transit-friendly) land use patterns.			✓
Policies:			
6.4.1.a Plan for an integrated multi-modal transportation system comprised of public transit, bicycle, pedestrian, automobile, and other transportation modes.			✓
6.4.1.b Refocus transportation investment from the construction of additional roadways only for the automobile to the expansion of a multimodal transportation system.			✓
6.4.1.c Encourage the use of "complete streets" design methods.	✓		
6.4.1.d Encourage employers to implement TDM strategies.			✓
Objective:			
6.4.2 Safe, interconnected transit, roadway, bicycle, equestrian, and pedestrian network.	✓		
Policies:			
6.4.2.a Ensure transit-, roadway-, and pedestrian-facilities design and level-of-service standards respect the unique character of our communities.	✓		
6.4.2.b Prioritize transportation improvements list to cost-effectively meet existing and future needs consistent with the MIP.			✓

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6.4.2.c	Require new development, where appropriate, to integrate sidewalks, pathways, bikeways, and transit infrastructure into new commercial and residential projects while enhancing community character.	✓		
6.4.2.d	Identify and improve hazardous and substandard sections of roadways, drainage infrastructure, and bridges, provided that the historical integrity of the roads and bridges are protected.			✓
6.4.2.e	Consider identification, acquisition where appropriate, and utilization of abandoned right of-ways for bikeways, pedestrian pathways, and open-space networks.			✓
6.4.2.f	Support the implementation of the *Central Maui Pedestrian & Bicycle Master Plan* (March 2012), when consistent with the MIP.			✓
Objective:				
6.4.3	An island-wide, multimodal transportation system that respects and enhances the natural environment, scenic views, and each community's character.			✓
Policies:				
6.4.3.a	Ensure that the roadway and transit alignments respect the natural environment and scenic views.			✓
6.4.3.b	Ensure that roadways and transit systems in rural areas and small towns enhance community character.			✓
6.4.3.c	Design all transit systems to respect visual corridors and Maui's character.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides pedestrian connection improvements to safely integrate the project site to existing commercial services. The Applicant will provide a mid-block pedestrian crossing with appropriate safety measures to create a safer pedestrian condition to and from the project to the Kehalani Village Center.**				
TRANSIT				
Goal:				
6.5	An island-wide transit system that addresses the needs of residents and visitors and contributes to healthy and livable communities.			✓
Objective:				
6.5.1	An integrated transit system that better serves all mobility needs of Maui's residents and visitors.			✓
Policies:				
6.5.1.a	Maximize access to public transit in town centers, commercial districts, and employment centers.			✓
6.5.1.b	Expand regional and inter-regional transit services, where appropriate, in heavily traveled corridors and within communities			✓
6.5.1.c	Increase the frequency of current service, add additional bus routes as demand requires, and transition to nonpolluting transit vehicles, as funding permits.			✓
6.5.1.d	Provide adequate transit infrastructure (e.g., bus pullouts, waiting benches and shelters, signs) along existing and future transit right-of-ways.			✓
6.5.1.e	Require new development where appropriate, to provide right-of-ways (ROWs) to accommodate transit circulation and support facilities.			✓

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6.5.1.f	Identify, protect, and preserve, or acquire corridors for future inter-community transit use, including but not limited to, rail and also multimodal use corridors.			✓
6.5.1.g	Establish transit corridors by planning for and securing right-of-way when appropriate for alternative modes of transportation (such as rail and water ferry service).			✓
6.5.1.h	Pursue improvements and upgrades to the existing transit system consistent with updated MDOT planning studies/transit plans (within the framework of comprehensive island-wide multimodal transportation plans).			✓
6.5.1.i	Increase inter-agency coordination between the Department of Planning, State Department of Transportation, County Department of Public Works, and other applicable agencies.			✓
Objective:				
6.5.2	Plan for a more diversified and stable funding base to support transportation goals.			✓
Policies:				
6.5.2.a	Support alternative methods and sources of funding transportation improvements (including impact fees, higher taxes, fare adjustments, dedicated sources of funding, and assessments).			✓
6.5.2.b	Collaborate with public-private entities or nonprofit organizations to reduce public transit operational expenses.			✓
6.5.2.c	Coordinate with appropriate Federal, State, and County agencies to fund transportation projects in areas where growth is anticipated.			✓
Analysis: **The Wailuku Apartment Rental Housing Project does not contravene the goal for an islandwide transit system that addresses the needs of residents and contributes to healthy and livable communities. There are three (3) public transit routes that operate within the vicinity of the proposed project on Wai'ale Road. The two (2) public bus stops nearest to the project are at Ka Hale A Ke Ola on Wai'ale Road and the other is on Kamole Street in the Kehalani Subdivision.**				
PARKS				
Goal:				
6.6	Maui will have a diverse range of active and passive recreational parks, wilderness areas, and other natural-resource areas linked, where feasible, by a network of greenways, bikeways, pathways, and roads that are accessible to all.	✓		
Objective:				
6.6.1	More effective, long-range planning of parks and recreation programs able to meet community needs.			✓
Policies:				
6.6.1.a	Support, consistent with the MIP, the implementation of open-space and recreational plans, such as the *Pali to Puamana Parkway* Master Plan and the *Upcountry Greenways Master Plan.*			✓
6.6.1.b	Utilize the ahupua'a approach by integrating mauka-to-makai natural landscapes into an island-wide parks and recreation functional plan.			✓

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6.6.1.c	Provide a balanced mix of passive and active parks, including neighborhood, community, and regional parks, in each community plan area.	✓		
6.6.1.d	Support the expansion of Haleakala National Park, where supported by affected communities.			✓
6.6.1.e	Support lo'i and dryland taro restoration in County, State, and Federal parks.			✓
6.6.1.f	Encourage private landowners to dedicate land to Federal, State, or County governments, or nonprofit land trusts, for parks and open-space protection consistent with the MIP.			✓
6.6.1.g	Strengthen inter-agency coordination including State and County departments, such as resolving joint use of facilities and properties.			✓
6.6.1.h	Work with the State to prepare and implement a master management plan for 'Āhihi-Kīna'u and La Perouse-Keone'ō'io Bay to Kanaloa Point region.			✓
Objective:				
6.6.2	Achieve parks and recreation opportunities to meet the diverse needs of our community.	✓		
Policies:				
6.6.2.a	Establish appropriate level-of-service standards at the neighborhood, community, and regional levels.			✓
6.6.2.b	Identify and acquire parks and recreational facilities that address existing park inadequacies and complement and enhance neighborhoods, communities, and natural land features.			✓
6.6.2.c	Design park facilities to preserve and enhance natural site characteristics, maximize views, protect environmental and cultural sites, and minimize water demands.			✓
6.6.2.d	Acquire lands along the shoreline, between coastal roadways and the ocean.			✓
6.6.2.e	Encourage the development of regional parks, district parks, and greenways in a manner that helps to contain sprawl, provide separation between distinct communities, or offer open space within urban communities.			✓
6.6.2.f	Require large master-planned communities that incorporate a mixture of park facilities pursuant to parks standards and functional plans.			✓
6.6.2.g	Support appropriate areas for cultural parks (e.g., Kepaniwai) in each community plan area.			✓
6.6.2.h	Incorporate community input to determine the appropriate location, design, and long-term stewardship of parks and recreation facilities.			✓
6.6.2.i	Manage commercial activities at public parks to minimize impacts to residents.			✓
6.6.2.j	Support public-private partnerships to implement the acquisition and development of parks when consistent with the General Plan.			✓
6.6.2.k	Support a coordinated program to improve, operate, and maintain joint-use facilities and grounds.			✓
Objective:				
6.6.3	An expanded network of greenways, trails, pathways, and bikeways.	✓		

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Policies:				
6.6.3.a	Link existing and future park sites, natural areas, the shoreline, and residential areas with a network of bikeways, pedestrian paths, trails, and greenways.	✓		
6.6.3.b	Support the implementation of plans and programs that facilitate pedestrian mobility and access to active and passive recreation areas and sites.	✓		
6.6.3.c	Collaborate with the State and private land owners to ensure perpetual access and proper stewardship of traditional trails and access systems.			✓
6.6.3.d	Facilitate the development of well-managed noncommercial campgrounds throughout the island.			✓
6.6.3.e	Consider requiring commercial bike rental businesses to provide funding that supports a mauka-to-makai Haleakalā bikeway improvement program.			✓
6.6.3.f	Ensure ADA compliance and seek opportunities to make all parks and recreational facilities accessible to people with disabilities.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project will provide four (4) distinct play areas for families on the property totaling 16,823 sf. Within close proximity of the project site is the Waikapu Community Center located to the west of the project area. Other public parks within the Wailuku-Kahului region are the Papohaku Park and Wailuku Community Center, War Memorial Athletic complex, Wailuku Little League baseball fields, Maui Regional Park, Maui Lani Parkway Park, Sakamoto Swimming Pool, and Keopuolani Regional Park. These recreational facilities are located within approximately 2 to 3 miles north and east of the project site. A nearby park adjacent to the Hale Makana O Wai'ale Affordable Housing complex contains a baseball field, basketball court, and playground equipment.**				
PUBLIC FACILITIES				
Goal:				
6.7	Maui will have adequate public facilities that meet the diverse needs of residents.			✓
Objective:				
6.7.1	More effective planning for public facilities to meet community needs.			✓
Policies:				
6.7.1.a	Ensure the development and update of island-wide public facilities functional plans that incorporate prioritized facilities, programs, and a financial component.			✓
6.7.1.b	Establish appropriate level-of-service standards for public facilities provided by the County.			✓
6.7.1.c	Pursue improvements and upgrades of County public facilities consistent with the public facilities functional plan.			✓
6.7.1.d	Recognize Wailuku Town as Maui's Civic Center and support the revitalization of the Civic Center District by consolidating government office spaces, enhancing landscape beautification, and providing adequate public parking.			✓
6.7.1.e	Support, with community input, the relocation of the Maui Community Correctional Center from Wailuku to an appropriate location in Pu'unēnē.			✓
6.7.1.f	Adequately plan and fund public safety facilities (fire, police, ambulance, civil defense) to meet community needs.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
6.7.1.g	Increase joint facilities utilization and program coordination between State and County agencies such as baseyards, communication centers, recreational facilities, etc., where feasible.			✓
6.7.1.h	Focus future expenditures for additional government office space, parking, and related facilities in Wailuku's Civic Center District.			✓
6.7.1.i	Encourage continuous and safe walkways for children within one mile of each school.			✓
6.7.1.j	Encourage public-private partnerships to identify and resolve public facility plan shortcomings when consistent with the General Plan.			✓
6.7.1.k	Incorporate community/area residents' input to determine the appropriate location and design of public facilities.			✓
Analysis: **The above-noted MIP objectives and policies related to Public Facilities are not applicable for the proposed Wailuku Apartment workforce rental housing project. The project does not involve provision of government services or provision of public facilities.**				
SCHOOLS AND LIBRARIES				
Goal:				
6.8	Maui will have school and library facilities that meet residents' needs and goals.			✓
Objective:				
6.8.1	Assist in providing appropriate school and library facilities in a timely manner and in strategic locations.			✓
Policies:				
6.8.1.a	Work in partnership with all educational institutions to meet current and future needs including appropriate location, timing, and design of future facilities.			✓
6.8.1.b	Allow for the expansion and intensification of uses at the UHMC including satellite campuses operating in remote areas.			✓
6.8.1.c	Encourage the DOE to build and maintain smaller, community-oriented schools.			✓
6.8.1.d	Encourage better cooperation by the State and County for use of State and County facilities.			✓
6.8.1.e	Encourage the State to upgrade, modernize, and expand school facilities, including those in remote communities.			✓
6.8.1.f	Work with the State to develop a master plan for the expansion of UHMC in accordance with the MIP.			✓
6.8.1.g	Support partnerships (public/private/nonprofit) to build and staff new schools and improve existing facilities.			✓
6.8.1.h	Work with the BOE HSPLS to provide centralized library services (including telecommunications) to all areas of Maui.			✓
6.8.1.i	Work with the State to expedite planning and construction of Kīhei High School, including the integration of the high school with the Maui Research and Technology Park.			✓
6.8.1.j	Work with the State to identify intermediate school sites in Central Maui and other areas where needed.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Objective:			
6.8.2 Provide a more expansive network of safe and convenient pedestrian-friendly streets, trails, pathways, and bikeways between neighborhoods and schools where appropriate.			✓
Policies:			
6.8.2.a Encourage the State to build new school facilities in appropriate locations that minimize time and distance for students to travel to and from school.			✓
6.8.2.b Encourage the State to implement the Safe Routes to School initiative with funding commitments to help the County plan and fund projects that ensure safe access routes to school.			✓
Analysis: **The Wailuku Apartment Rental Housing Project provides 324 market and affordable multi-family residential units. While the proposed project does not directly address the development of educational facilities, the Applicant will coordinate with the DOE to address requirements for school facility impact fees.**			
HEALTH CARE			
Goal:			
6.9 All of Maui residents will have the best possible health care to include healthy living, disease prevention, as well as acute and long-term care.			✓
Objective:			
6.9.1 Greater autonomy to the Maui region in their efforts to improve medical care on the island.			✓
Policies:			
6.9.1.a Encourage the State to give greater autonomy to the Maui region in their efforts to improve medical care on the island.			✓
6.9.1.b Support innovative financial solutions, such as capital partnerships, joint ventures, and consolidations for MMMC and other health institutions.			✓
6.9.1.c Support MMMC as a major core medical center that provides a greater range of services.			✓
6.9.1.d Support the immediate development of a critical access hospital in West Maui.			✓
6.9.1.e Support the expansion of regional critical-access facilities, where allowed by Federal regulations.			✓
6.9.1.f Improve medical service to remote and outlying regions.			✓
6.9.1.g Support transportation services for dialysis patients and community dialysis programs.			✓
6.9.1.h Work with the State to determine the feasibility of appropriate medical facilities in South Maui and Hāna, including the possible reestablishment of a small community hospital in Hāna, the establishment of a hospital in South Maui, and assist the State in securing funding to meet Maui's health care needs.			✓
Objective:			

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
6.9.2 An expansion of long-term care facilities and long-term care alternatives to meet the needs of our aging population.			✓
Policies:			
6.9.2.a Support efforts to increase Maui's long-term care bed capacity to cover current and future needs, close to large population centers.			✓
6.9.2.b Recognize that facilities for low-income elders who need long-term care are a needed form of affordable and subsidized housing.			✓
6.9.2.c Evaluate the needs of the long-term disabled and provide planning support for their care, if there is a need for long-term care facilities.			✓
6.9.2.d Consider long-term care facilities as a major potential employment base and encourage the recruitment and training of potential employees.			✓
Objective:			
6.9.3 More support to home-care and community-based programs so they become alternatives to traditional nursing homes.			✓
Policies:			
6.9.3.a Support the establishment of a program to assist the elderly and people with disabilities to remain in their homes or in a home-like setting.			✓
6.9.3.b Support the establishment of senior and adult-day-care centers and senior housing.			✓
6.9.3.c Continue to support existing senior centers (e.g. Kaunoa), and establish new senior centers that will provide day-care sites and programs for the disabled and elderly.			✓
6.9.3.d Support funding alternatives for community-based services that assist home-care efforts.			✓
6.9.3.e Encourage the State to adopt the recommendations contained within the Legislative Reference Bureau's report entitled "Gimme a Break: Respite Care Services in Other States," (December 2007) where appropriate, feasible, and consistent with the MIP.			✓
Objective:			
6.9.4 Improved preventative medicine and primary health care.			✓
Policies:			
6.9.4.a Develop and utilize health-status benchmarks to measure prevention and primary health care service delivery.			✓
6.9.4.b Support programs that provide family planning assistance.			✓
Analysis: **The above-noted MIP objectives and policies related to health are not applicable for the proposed Wailuku Apartment Rental Housing Project.**			

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ENERGY			
Goal:			
6.10 Maui will meet its energy needs through local sources of clean, renewable energy, and through conservation.	✓		
Objective:			
6.10.1 Reduce fossil fuel consumption. Using the 2005 electricity consumption as a baseline, reduce by 15 percent in 2015; 20 percent by 2020; and 30 percent by 2030.			✓
Policies:			
6.10.1.a Support energy efficient systems, processes, and methods in public and private operations, buildings, and facilities.	✓		
6.10.1.b Support the Maui Solar Rooftop initiative.	✓		
6.10.1.c Support Hawai`i Energy and other Public Utility Commission (PUC) approved energy efficiency programs.			✓
Objective:			
6.10.2 Increase the minimum percentage of electricity obtained from clean, renewable energy sources. By 2015, more than 15 percent of Maui's electricity will be produced from locally-produced, clean, renewable energy sources, 25 percent by 2020, and 40 percent by 2030.	✓		
Policies:			
6.10.2.a Evaluate available renewable energy resource sites and applicable technologies.	✓		
6.10.2.b Encourage the installation of renewable energy systems, where appropriate.	✓		
6.10.2.c Support the establishment of new renewable energy facilities at appropriate locations provided that environmental, view plane, and cultural impacts are addressed.			✓
6.10.2.d Encourage all new County facilities completed after January 1, 2015, to produce at least 15 percent of their projected electricity needs with onsite renewable energy.			✓
Objective:			
6.10.3 Increased use of clean, renewable energy.	✓		
Policies:			
6.10.3.a Support efforts in the PUC to upgrade Maui's power grid to integrate renewable energy from multiple sources and wheeling of electricity.			✓
6.10.3.b Encourage the PUC to work with the County to implement and expedite community supported renewable energy projects.			✓
6.10.3.c Encourage efforts to produce more renewable energy using distributed generation.			✓
6.10.3.d Encourage import substitution by MECO and the broader community to become more self-sufficient in energy production.	✓		

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
6.10.3.e Educate the public on the economic and environmental benefits from the increased use of renewable energy.	✓		
6.10.3.f Encourage support from the Federal government, State, and the private sector for Maui's renewable energy objectives.			✓
6.10.3.g Encourage incentives to support the development and use of renewable energy.			✓
Objective:			
6.10.4 More efficient distribution of power throughout the island while preserving island beauty.			✓
Analysis: **The Wailuku Apartment Rental Housing Project is exploring the feasibility of installing photovoltaic solar systems within the project to reduce energy costs and to increase energy self-sufficiency. The Applicant met with representatives of Maui Electric Company to discuss the proposed installation of solar systems within the project.**			
HARBORS AND AIRPORT			
Goal:			
6.11 Maui will have harbors and airports that will efficiently, dependably, and safely facilitate the movement of passengers and cargo.			✓
Objective:			
6.11.1 Upgraded harbor facilities to handle larger volumes of freight and passengers and additional small boat harbors.			✓
Policies:			
6.11.1.a Support the expansion and upgrade of Kahului Harbor through the following, provided that any expansion is respectful of cultural practices and existing recreational uses and supports improved water quality:			✓
(1) Accommodate increasing volumes of cargo;			✓
(2) Provide deeper pier depths and greater fuel-receiving and storing capacities and			✓
(3) Ensure safe and efficient work areas, including separating passenger operations from fuel and cargo operations.			✓
6.11.1.b Work with public and private entities to provide adequate pier slips, utilities, repair facilities, and waste-disposal capabilities.			✓
6.11.1.c Encourage the State to safely separate passenger (cruise and ferry) operations from hazardous bulk fuels and heavy cargo transporting operations, while not decreasing harbor's capacity to safely support various recreational uses.			✓
6.11.1.d Encourage the State to develop cargo inspecting sites and facilities for efficient cargo and container processing and transportation and to prevent alien species entry.			✓
6.11.1.e Support a State and County task force to study the feasibility of a second commercial harbor on Maui.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Objective:			
6.11.2 Establish more economically thriving and environmentally sensitive small boat harbors accommodating resident and business activity, including fishing, recreation, and tour boats.			✓
Policy:			
6.11.2.a Provide for needed shore-side facilities and capabilities to support small boat harbor users (e.g. repair facilities, parking, cold storage, and mass-transit connections).			✓
Objective:			
6.11.3 Upgraded airport facilities and navigation aids to serve the needs of passengers, freight movements, and general aviation.			✓
Policies:			
6.11.3.a Protect the island's airports from encroaching urbanization that may negatively impact the airport operations.			✓
6.11.3.b Support State efforts to improve Kahului Airport operations to better serve passenger and cargo needs.			✓
6.11.3.c Support State efforts to identify sites and plan to relocate and accommodate small and rotary wing aircraft.			✓
6.11.3.d Encourage the State to improve airport safety including lighting, fuel transmission, fuel safety, etc.			✓
6.11.3.e Consider expansion of rental car facilities in West and South Maui.			✓
6.11.3.f Consider expansion of mass transit (bus, fixed-rail, shuttle, and taxis, bicycle, and pedestrian facilities) to and from Kahului Airport and not limited to passenger movements (allowing for luggage and cargo).			✓
6.11.3.g Encourage the State to maintain airport capacity and to encourage more responsive air services to Hāna and Kapalua.			✓
Analysis: **The above-noted MIP objectives and policies related to Harbors and Airports are not applicable for the proposed Wailuku Apartment Rental Housing Project. The project is not a government-funded program and does not involve transportation improvements related to harbors and airports.**			
CHAPTER 7 – LAND USE			
AGRICULTURAL LANDS			
Goal:			
7.1 Maui will have a prosperous agricultural industry and will protect agricultural lands.			✓
Objective:			
7.1.1 Significantly reduce the loss of productive agricultural lands.			✓
Policies:			
7.1.1.a Allow, where appropriate, the clustering of development on agricultural lands when approved as a CSD plan or similar approval mechanism.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
7.1.1.b	Require, where appropriate, the review and approval of CSD plans prior to the subdivision of agricultural land.			✓
7.1.1.c	Discourage developing or subdividing productive agricultural lands for residential uses in which the residence would be the primary use and any agricultural activities would be secondary uses.			✓
7.1.1.d	Consider requirements for public notification and review of the subdivision of agricultural land into four or more lots.			✓
7.1.1.e	Focus urban growth, to the extent practicable, away from productive and important agricultural lands.	✓		
7.1.1.f	Strongly discourage the conversion of productive and important agricultural lands (such as sugar, pineapple, and other produce lands) to rural or urban use, unless justified during the General Plan update, or when other overriding factors are present.			✓
7.1.1.g	Further develop the requirements for agricultural assessments found under Section 19.510, MCC.			✓
7.1.1.h	Provide incentives for landowners to preserve and protect agricultural lands from development through the use of TDR/PDR, tax credits, easement programs, or similar means.			✓
7.1.1.i	Promote the use of U.S.D.A. Farm and Ranch Lands Protection Program grants to fund the acquisition of conservation easements on eligible agricultural lands.			✓
7.1.1.j	Require all major developments adjacent to agricultural lands to provide an appropriate and site-specific agricultural protection buffer as part of a required site plan.			✓
7.1.1.k	Support and promote the viability of Maui's agricultural businesses through property tax incentives and other programs and subsidies.			✓
7.1.1.l	Encourage future community plan efforts to identify lands within the County Agricultural zoning district that are primarily being used for large-lot residential or rural use and consider such lands for reclassification to an appropriate County Rural zone.			✓
Objective:				
7.1.2	Reduction of the island's dependence on off-island agricultural products and expansion of export capacity.			✓
Policies:				
7.1.2.a	Coordinate with the agricultural community, associations/community groups, agricultural landowners, and the State to designate IALs.			✓
7.1.2.b	Support an incentive package for productive Agricultural Lands which aims to ensure agricultural viability for small- and commercial-scale agricultural producers.			✓
7.1.2.c	Actively look to acquire land and provide infrastructure to expand the agricultural park and establish new agricultural parks.			✓
7.1.2.d	Support the designation of a research and development area within agricultural parks to help farmers stay attuned to new technology and research.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
7.1.2.e	Support local cooperative extension services to facilitate timely technology transfer opportunities.			✓
7.1.2.f	Support plans and programs to develop additional sources of water for irrigation purposes.			✓
7.1.2.g	Consider appropriate subdivision requirements (gravel roads, above-ground utilities, etc.) in those subdivisions creating Agricultural Parks where lots are limited to agricultural production with no dwellings.			✓
7.1.2.h	Support the recommendations, policies, and actions contained within the Maui Agricultural Development Plan, July 2009, when consistent with the MIP.			✓
7.1.2.i	Allow water and tax discounts for legitimate farming operations on rural and agricultural land.			✓
7.1.2.j	Give priority in delivery and use of agricultural water and agricultural land within County agricultural parks to cultivation of food crops for local consumption.			✓
7.1.2.k	Support programs that control pests and diseases that affect agriculture.			✓
7.1.2.l	Support the development of training and apprenticeship programs to encourage an adequate supply of agricultural workers.			✓
Objective:				
7.1.3	Support and facilitate connectivity between communities.			✓
Policies:				
7.1.3.a	Evaluate the impact of gated communities on interconnectivity.			✓
7.1.3.b	Discourage land use and urban design that impedes interconnectivity between adjacent communities.			✓
Analysis: **The Wailuku Apartment Rental Housing Project is located on land that was formerly used for sugar cane cultivation. Although currently zoned Argircultural, the subject property is designated for "Future Growth Reserve" by the Wailuku-Kahului Community Plan Map and located within the UGB of the MIP.**				
RURAL AREAS				
Goal:				
7.2	Maui will have a rural landscape and lifestyle where natural systems, cultural resources and farm lands are protected and development enhances and compliments the viability and character of rural communities.			✓
Objective:				
7.2.1	Reduce the proliferation and impact of residential development outside of urban, small town, and rural growth boundaries.	✓		
Policies:				
7.2.1.a	Focus development to areas inside urban, small town, and rural growth boundaries to preserve natural, cultural, and agricultural resources.	✓		
7.2.1.b	Encourage cluster development with a mandatory buffer requirement/clear edge at the interface of country towns, agricultural uses, and surrounding rural landscapes.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
7.2.1.c Encourage or require, where appropriate, CSDs and the use of green spaces/natural separations to protect the character of rural landscapes.			✓
7.2.1.d Encourage basic goods/services in business country towns.			✓
7.2.1.e Allow for mixed uses, including residential uses, within Business Country Town Districts.			✓
7.2.1.f Encourage the use of alternative stormwater management techniques that minimize land disturbance and preserve natural drainage features.			✓
7.2.1.g Encourage green belts, open space buffers, and riparian zones to minimize conflicts between agriculture and residential uses.			✓
7.2.1.h Evaluate the impact of gated communities on inter-connectivity.			✓
Objective:			
7.2.2 More appropriate service/infrastructure standards to enhance and protect the island's rural character and natural systems.			✓
Policies:			
7.2.2.a Minimize impermeable surfaces within rural areas.			✓
7.2.2.b Protect and support the character, economic viability, and historic integrity of Maui's small towns.			✓
7.2.2.c Use infrastructure, public service, and design standards that are appropriate to rural areas.			✓
7.2.2.d Discourage land use and urban design that impede interconnectivity between adjacent communities.	✓		
Analysis: **The Wailuku Apartment Rental Housing Project is located in an area designated for future urban growth and within the UGB. The proposed project is connected and integrated to the existing Wailuku neighborhoods by a system of streets and sidewalks.**			
URBAN AREAS			
Goal:			
7.3 Maui will have livable human-scale urban communities, an efficient and sustainable land use pattern, and sufficient housing and services for Maui residents.	✓		
Objective:			
7.3.1 Facilitate and support a more compact, efficient, human-scale urban development pattern.	✓		
Policies:			
7. 3.1.a Ensure higher-density compact urban communities, infill, and redevelopment of underutilized urban lots within Urban Growth Boundaries.	✓		
7.3.1.b Maintain a distinct separation between communities, such as but not limited to, Wailuku and Waikapū; Wailuku and Waiheʻe; Pukalani and Makawao; Pukalani and Kula; Makawao and Hāliʻimaile; Lahaina and Kāʻanapali; Kīhei and Māʻalaea; and Māʻalaea and Waikapū, to protect the character and identity of Maui's communities.	✓		

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
7.3.1.c	Strengthen evaluation requirements for new urban expansion, new towns, and major urban infill projects within urban growth areas. Tailor submittal requirements to reflect the impact or scale of different projects.			✓
7.3.1.d	Ensure future amendments to urban growth boundaries achieve the following: (1) provide a beneficial extension of the existing community; (2) are 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.			✓
7.3.1.e	Evaluate the impact of gated communities on inter-connectivity.			✓
7.3.1.f	Encourage the development and implementation of neighborhood design standards that are environmentally friendly, such as LEED for Neighborhood Development (LEED – ND) standards.			✓
7.3.1.g	Discourage future pyramid zoning within the industrial zoning districts, while allowing accessory commercial uses and grandfathering existing uses.			✓
7.3.1.h	Promote agriculture by encouraging community gardening, community-supported agricultural programs, and farmers markets within and adjacent to urban areas.			✓
7.3.1.i	Discourage land use and urban design that impedes inter-connectivity between adjacent communities.	✓		
Objective:				
7. 3.2	Facilitate more self-sufficient and sustainable communities.	✓		
Policies:				
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:			
	(1) Directing residential development to job-rich areas;	✓		
	(2) Allowing for appropriate commercial development and community services to shorten commutes; and			✓
	(3) Allowing home occupations or home-based businesses that are compatible with surrounding neighborhoods and lifestyles.			✓
7.3.2.d	Ensure, where appropriate, that affordable employee housing and multi-modal transportation opportunities are located near major employment centers.	✓		
7.3.2.e	Discourage the establishment of bedroom communities where long commutes are required to employment centers.	✓		
7.3.2.f	Facilitate the 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 multifamily housing.	✓		

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7.3.2.h Encourage the placement of rental housing projects in the same areas as for-sale housing to facilitate mixed-income communities.	✓		
7.3.2.i Develop communities that provide sufficient parks, schools, libraries, and other essential public facilities and services to serve resident needs.			✓
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.			✓
Objective:			
7.3.3 Strengthen the island's sense of place.	✓		
Policies:			
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 historic country towns, 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 input through 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.			✓
Objective:			
7.3.4 Strengthen planning and management for the visitor industry to protect resident quality of life and enhance the visitor experience.			✓
Policies:			
7.3.4.a Discourage the conversion of hotel units to timeshares and fractional ownership.			✓
7.3.4.b Monitor and manage the amount of, and impacts from, timeshares and fractional ownership.			✓
7.3.4.c Manage short-term rentals and bed-and-breakfast homes through a permitting and regulatory process in accordance with adopted ordinances and community plan policies.			✓
7.3.4.d Limit large-scale resort development to the four existing resort destination areas of Wailea, Mākena, Kapalua and Kā'anapali. "Large Scale Resort" is defined as complexes that include multiple accommodation facilities, activity businesses, retail complexes, and other amenities.			✓
Objective:			

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
7.3.5	Ensure that Maui's planning and development review process becomes more transparent, efficient, and innovative.			✓
Policies:				
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, particularly as it relates to the mitigation of long-term cumulative impacts resulting from development projects.			✓
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 Wailuku Apartment Rental Housing Project is located in an area designated for urban growth and use by the MIP and Wailuku-Kahului Community Plan Map. The proposed project is well connected and integrated to the existing Wailuku neighborhood by a system of streets and sidewalks. The proposed project will be architecturally compatible to the adjacent neighborhood. The proposed project provides market and affordable housing in close proximity to employment centers.**				
CHAPTER 8 – DIRECTED GROWTH PLAN				
URBAN AND SMALL TOWN GROWTH AREA				
Goal:				
8.1	Maui will have well-serviced, complete, and vibrant urban communities and traditional small towns through sound planning and clearly defined development expectations.	✓		
Policies:				
8.1.a	The County, with public input, will be responsible for designating new growth areas where infrastructure and public facilities will be provided, consistent with the policies of the MIP and in accordance with State and County infrastructure plans.	✓		
8.1.b	Amendments to a UGB or STB shall be reviewed as a MIP amendment. A UGB or STB shall only be expanded if the island-wide inventory (maintained by the Department of Planning) of existing land uses (residential, commercial, industrial) indicates that additional urban density land is necessary to provide for the needs of the projected population growth within ten years of that inventory; or, during the decennial update of the MIP.			✓
8.1.c	Community plans shall provide for urban density land use designations only within UGBs and Small Towns. The County may only support and approve State Urban Land Use Designations for areas within UGBs, STBs, and Rural Villages.	✓		
8.1.d	The unique character and function of existing small towns shall be protected to retain and preserve their sense of place.			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
8.1.e	New development shall be consistent with the UGBs, STBs, and all other applicable policies of the MIP. New urban-density development shall not be allowed outside of a UGB or STB.	✓		
8.1.f	The County, as a condition of development approval, shall require developers of privately owned infrastructure systems to provide financial insurance (bonding, etc.) for the operation and maintenance of these systems.			✓
8.1.g	The County shall implement a zoning program to comprehensively redistrict and rezone lands within UGBs according to updated community plan policies and map designations.			✓
8.1.h	The County will seek to focus capital improvements (schools, libraries, roads, and other infrastructure and public facilities) within the UGBs and STBs in accordance with the MIP.			✓
8.1.i	The County will promote (through incentives, financial participation, expedited project review, infrastructure/public facilities support, etc.) appropriate urban infill, redevelopment and the efficient use of buildable land within UGBs to avoid the need to expand the UGBs.	✓		
8.1.j	The MIP's UGBs and STBs shall not be construed or implemented to prohibit the construction of a single-family dwelling on any existing parcel where otherwise permitted by law.			✓
Analysis: **The Wailuku Apartment Rental Housing Project is located in the UGB. The proposed project will not adversely impact the character of Wailuku Town. The proposed action is consistent with the MIP's directed growth strategies.**				
RURAL GROWTH AREA				
Goal:				
8.2	Maui will maintain opportunities for agriculture and rural communities through sound planning and clearly defined development expectations.			✓
Policies:				
8.2.a	Amendments to a RGB shall be reviewed as an MIP amendment. A RGB shall only be expanded if an island-wide inventory of existing land uses (residential, commercial, industrial) indicates that additional lands are necessary to provide for the needs of the projected population growth within ten years of that inventory; or, during the decennial update of the MIP.			✓
8.2.b	New development shall be consistent with RGB and all other applicable policies and requirements of the MIP. Public, quasi-public, civic, and limited commercial or industrial uses may be allowed in the RGB when the proposed uses demonstrate a public need and are consistent with the Community Plan and zoning.			✓
8.2.c	Environmental protection and compatibility will be a top priority in rural growth areas.			✓
8.2.d	All development within rural growth areas should avoid encroachment upon prime agricultural land.			✓
8.2.e	Rural growth areas include Rural Residential Areas and Rural Villages. Rural residential areas may be designated when they are located in association with or on the border of urban growth areas or Small Towns; and/or when they provide for complete, self-sufficient rural communities with a range of uses to			✓

Maui Island Plan Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable		S	N/S	N/A
	be developed at densities that do not require urban infrastructure.			
8.2.f	Community plans shall provide for rural density land use designations only within RGBs; provided that limited community plan urban designations may be allowed within Rural Villages. New rural growth areas shall not be located where urban expansion may ultimately become necessary or desirable. New rural-density development shall not be allowed outside of a RGB.			✓
8.2.g	New rural growth areas intended to be complete, self-sufficient rural communities must be located a significant distance from existing urban areas, distinctly separated by agricultural or open lands.			✓
8.2.h	Urban-scale infrastructure and public facilities shall not be provided in rural areas except as described in the defined Level-of-Service (LOS) standards. There should be no expectations of urban services in rural areas.			✓
8.2.i	Urban development standards shall not be required within RGBs except in fulfillment of Federal law.			✓
8.2.j	The unique character and function of existing small towns and rural communities shall be protected to retain and preserve their sense of place.			✓
8.2.k	Preserve rural landscapes in which natural systems, cultural resources, and agricultural lands are protected and development compliments rural character and contributes to the viability of communities and small towns.			✓
8.2.l	The MIP's RGBs shall not be construed or implemented to prohibit the construction of a single family dwelling on any existing parcel where otherwise permitted by law.			✓
8.2.m	The County shall implement a zoning program to comprehensively redistrict and rezone lands within RGBs, and to implement community plan policies and map designations.			✓
8.2.n	At the time of zoning from agricultural to rural, Council will consider prohibiting restrictions on agricultural activity.			✓
Analysis: **The proposed project is located in an area designated UGB by the MIP. The proposed project is not applicable to the MIP goals and objectives related to Rural Growth Boundaries.**				
PROTECTED AREA POLICY				
8.3.a	The Protected Areas in Diagrams E-1, NW-1, N-1, NE-1, S-1, SE-1, and WC-1 should be concurrently reviewed with Table 8-2 and with any proposed land uses that may result in an adverse impact on a Protected Area. The County Council and the Administration should be notified if a Protected Area may be compromised by a development proposal.			✓
Analysis: **The Wailuku Apartment Rental Housing Project is not located in a Protected Area of the MIP.**				

H. WAILUKU-KAHULUI COMMUNITY PLAN

The project site is located within the Wailuku-Kahului Community Plan region, one (1) of nine (9) community plan regions established in the County of Maui. Each region's growth and development is guided by a Community Plan. The County's Community Plan reflects current and anticipated conditions in the Wailuku-Kahului region and advances planning

goals, objectives, policies, and implementation considerations to guide decision-making in the region. The primary purpose of the Community Plan is to outline a detailed agenda for carrying out these policies and objectives. The Wailuku-Kahului Community Plan was adopted by the County of Maui through Ordinance Number 3061, and became effective on June 5, 2002. The Community Plan land use map designates the subject property as "Future Growth Reserve". See **Figure 21**. As part of the project's Section 201H-38, HRS application, an exemption from the Community Plan Amendment process is being sought.

The Wailuku-Kahului Community Plan identified the lack of affordable housing as one of its major problems. Similarly, the Countywide Policy Plan identifies the critical need and demand for affordable housing. Providing affordable rental housing opportunities for residents is an important step towards addressing this key policy consideration.

Rentals also serve those households who only have a single member. Rentals provide a housing product that allows un-related individuals to room together thereby bringing their individual housing costs down. According to the Bureau of Labor Statistics, Maui's rental households are 40 percent single individuals. In the case of two (2) individuals renting a two-bedroom unit, one roommate can be at 70 percent AMI and the second individual at 50 percent AMI to meet the affordability requirements for a 120 percent AMI restricted unit. Workforce rentals at 80 percent to 140 percent AMI in this scenario can house people at lower AMI levels. This project with 324 units, will have a ripple effect in the region to provide opportunities for those at lower area median incomes. It will relieve pressure in homes that are currently doubling up and free up older rental stock in the area for other households.

The proposed project is consistent with the following goals, objectives, and policies of the Wailuku-Kahului Community Plan as outlined below.

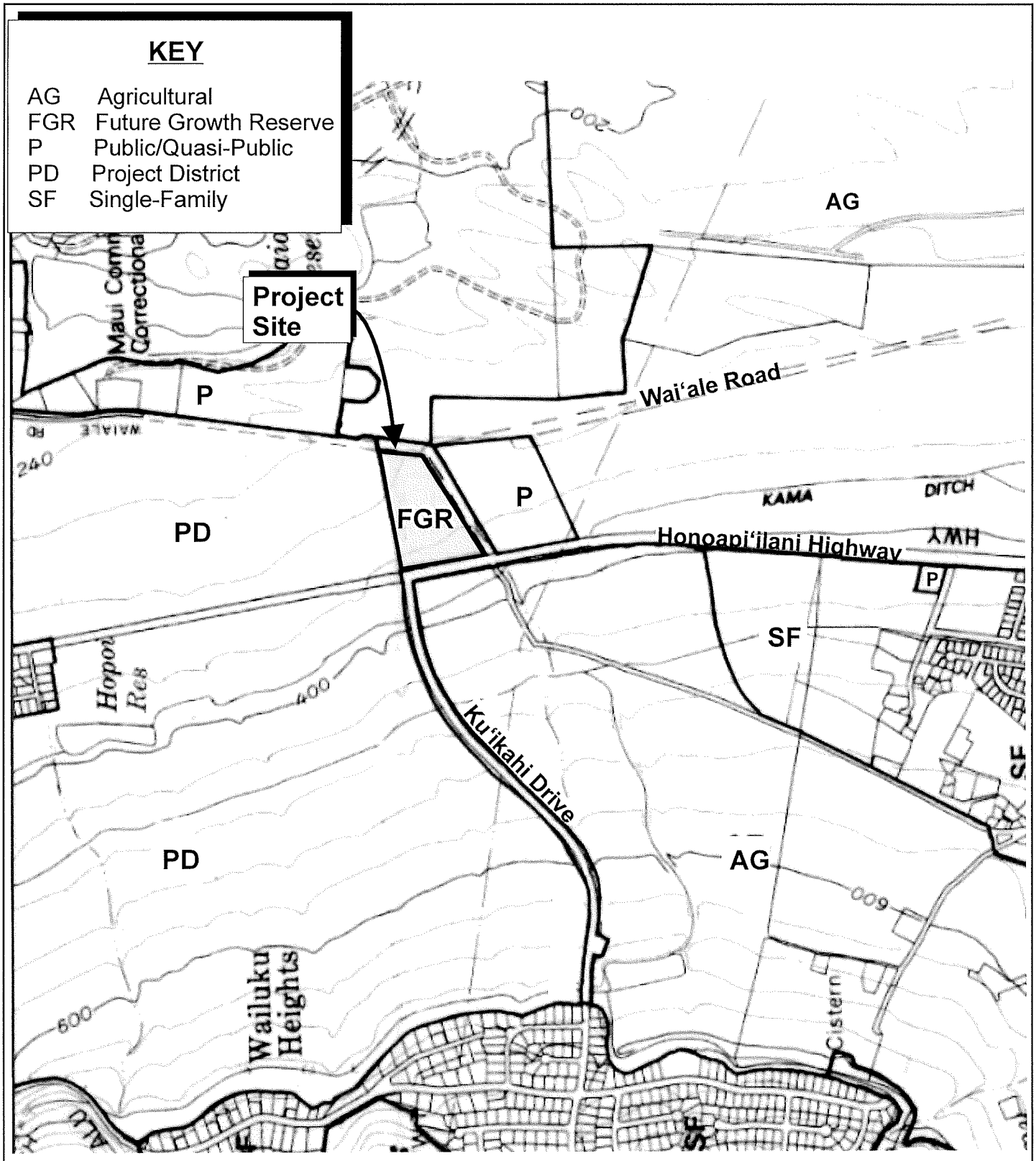
HOUSING

Goal:

A sufficient supply and choice of attractive, sanitary and affordable housing accommodations for the broad cross section of residents, including the elderly.

Objectives and Policies:

- *Provide efficient land areas for new residential growth which relax constraints on the housing market and afford variety in type, price, and locations of units. Opportunities for the provision of housing are presently constrained by a lack of expansion areas. This condition should be relieved by a choice of housing in a variety of locations, both rural and urban in character.*



Source: County of Maui, Department of Planning

Figure 21

Wailuku Apartment Rental Housing Project

Wailuku-Kahului Community Plan Map

NOT TO SCALE

Prepared for: Legacy Wailuku LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Wailuku-Kahului Community Plan Map

- *Seek alternative residential growth areas within the planning region, with high priority given to the Wailuku and Kahului areas. This action should recognize that crucial issues of maintaining important agricultural lands, achieving efficient patterns of growth, and providing adequate housing supply and choice of price and location must be addressed and resolved.*

- *Promote efficient housing designs in order to reduce residential home energy and water consumption.*

Discussion and Response:

As noted earlier in this report, 60 percent of the total proposed rental units will be in conformance with HHFDC's Affordable Housing Rent Guidelines for those earning 80 percent to 140 percent of Maui's median income. The project site is centrally located and surrounded with existing residential neighborhoods, and it is in very close proximity to commercial and public facilities within the community plan region. The location is ideal for multi-family residential projects given that all services and development is already located in the area creating a compact area for development versus having to sprawl development on Maui's valuable landscape. This compact development approach located by concentrated residential and commercial uses in a specific area of Wailuku that already has infrastructure available to the site, will not only save on infrastructure expansion requirements, but also create a more walkable environment for the local residents of Wailuku.

I. COUNTY ZONING

The proposed housing project site is zoned "Agricultural", according to Maui County zoning. While the current zoning does not allow for the proposed residential uses, this EA and a Section 201H-38, HRS application has been prepared for submittal to the Hawai'i Housing Finance and Development Corporation. Included in the Section 201H-38, HRS filing will be a request to exempt the proposed project from certain provisions of the Maui County Code (MCC) which will allow the proposed project to be developed for workforce apartment rental housing. These exemptions are further described in Chapter IV of this document.

J. HAWAI'I COASTAL ZONE MANAGEMENT PROGRAM

The Hawai'i Coastal Zone Management Program (HCZMP), as formalized in Chapter 205A, HRS, establishes objectives and policies for the preservation, protection, and restoration of natural resources of Hawai'i's coastal zone. The subject property is not within the County of Maui's Special Management Area. However, the applicability of coastal zone management considerations has been reviewed and assessed.

1. Recreational Resources

Objective:

Provide coastal recreational opportunities 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 requiring 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 recreational value consistent with public safety standards and conservation of natural resources;

vi. Adopting water quality standards and regulating point and nonpoint 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; and

viii. Encouraging 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.

Response: The project site is located inland and away from the coastline. As such, the proposed action is not expected to impact coastal recreational opportunities or affect existing public access to the shoreline.

2. **Historic/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 archaeological 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 resources.*

Response: The proposed project is not anticipated to have an adverse effect on historical or cultural resources. An AAR was prepared with fieldwork conducted to assess the presence and/or absence of any historical and archaeological resources on the proposed project site. The AAR further noted that based on the negative findings, coupled with the compounded disturbances across the parcel, the probability of encountering in situ cultural remains is low. The report further recommends that an archaeological monitoring plan (AMP) be prepared for all future ground-altering activities. An AMP is being prepared by ASH and will be submitted for review and approval prior to the commencement of construction activities.

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.*

Response: As indicated previously, the project is not located on or near the shoreline or within a coastal area. The proposed project will not adversely impact coastal scenic and open space resources.

4. Coastal Ecosystem

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 nonpoint source water pollution control measures.*

Response: The proposed project is located miles inland, away from the coastal ecosystems and is, therefore, not anticipated to have adverse impacts on coastal/shoreline resources, including reefs and marine resources. Also, the proposed project does not include any stream diversions or channelization. Appropriate Best Management Practices (BMPs) will be utilized to ensure that construction runoff is appropriately captured, minimizing any impact on coastal waters.

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 industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and

c. Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments 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 effects are minimized; and

iii. The development is important to the State's economy.

Response: The proposed project is not a coastal dependent development. The project site is located inland from the shoreline. The proposed project will stimulate the economy through the generation of construction jobs and related job opportunities during the development of the proposed apartment housing project. The proposed project does not contravene the objective and policies for economic use.

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 nonpoint source pollution hazards;

b. Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;

c. *Ensure that developments comply with requirements of the Federal Flood Insurance Program; and*

d. *Prevent coastal flooding from inland projects.*

Response: The project site currently falls within Zone X (shaded), an area of minimal flooding. The State Department of Transportation Airports Division noted the project site is located approximately four (4) miles from Runway 2 of the Kahului Airport. As such, the SDOT cautioned standing water in the existing open drainage channel shall be eliminated and water must be drained or pumped out within 48 hours of peak weather events to eliminate potential hazardous wildlife attractions that may impact aircraft operations at Kahului Airport. Stormwater from the open channel drains into a retention basin in Waikapu and is not expected to remain in the channel. However, any standing water that may remain in the channel is expected to dissipate within 48-hours. As such, the open drainage channel is not expected to attract hazardous wildlife which may affect flight operations at the Kahului Airport. Drainage improvements will be designed in accordance with the Drainage Standards of the County of Maui to ensure that the project will not adversely affect downstream properties from the effects of flooding and erosion.

Adverse impacts to hazard-sensitive areas are not anticipated as the project site is not located within a flood hazard district and is not located near the shoreline. In addition, tsunami inundation parameters do not apply to the subject project.

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 or 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.*

Response: Opportunities for agency and public review of the proposed action are provided pursuant to Chapter 343, HRS. The applicant has, and will continue

to engage the public through the development review process. Various community and government agency meetings were held to solicit input from the public regarding the proposed project.

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.*

Response: The project has, and will continue to address public awareness, education, and participation objectives. Community meetings with the Waikapu Community Association Board of Directors and members were held on May 8 and June 6, 2017 to solicit input from the public regarding the proposed project. Also, a meeting was held with Kehalani Homeowners' Board of Directors on May 16, 2017. Meetings with individual local elected officials were also held to brief them and solicit comments regarding the proposed project. Opportunities for agency and further public review of the proposed action are provided through the notification review and comment processes pursuant to Chapter 343, HRS and Section 201H-38.

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;

c. *Minimize the construction of public erosion-protection structures seaward of the shoreline;*

d. *Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor; and*

e. *Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.*

Response: The project site is located inland, away from the shoreline and is not anticipated to impact shoreline processes.

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 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.*

Response: As previously stated, the project is located inland, away from the ocean and is, therefore, not anticipated to have an impact on marine or coastal resources.

REQUESTED EXEMPTIONS PURSUANT TO SECTION 201H-38, HRS

IV

IV. REQUESTED EXEMPTIONS PURSUANT TO SECTION 201H-38, HRS

A. INTRODUCTION

Hawai'i Revised Statutes (HRS) Section 201H-38, *"Housing development; exemption from statutes, ordinances, charter provision, and rules"* allows developers of eligible Section 201H-38, HRS projects to seek exemptions from all statutes, ordinances, and rules of any governmental agency relating to planning, zoning, and construction standards that do not negatively affect the health and safety of the general public in exchange for providing affordable housing.

The Wailuku Apartment Rental Housing Project will be a 324-unit affordable and market rental project, with 60 percent, or 195 units, offered to households earning 80 to 140 percent of the Area Median Income (AMI). This project will be Maui County's first major workforce rental project of sizable scale in over 30 years. Most of Maui County's current projects in the development pipeline are affordable or workforce for-sale homes. The project serves a large unmet demand for rental housing, whereby 6,709 units are estimated to be required by 2025. The median price of a home in Maui County continues to increase, taking the median over $700,000.00 which effectively prices out many from homeownership. In response to this increasing workforce rental demand pressure, high cost of construction, and limited availability of zoned land, Section 201H-38 exemptions are sought.

The exemption requests which follow are necessary to achieve and maintain the financial feasibility of the project and thereby reduce the per unit cost of the project. If the proposed exemptions are granted, Legacy Wailuku LLC, will be able to offer 324 units of workforce housing with 60 percent restricted for 30 years to qualified households between 80 to 140 percent AMI. See **Appendix "I"**.

B. EXEMPTIONS TO BE REQUESTED

This EA has been prepared to support the Applicant's Section 201H-38 application for submittal to the Hawai'i Housing Finance and Development Corporation (HHFDC). Included in the Section 201H-38, HRS filing will be a request to exempt the proposed project from certain provisions of HRS and the Maui County Code (MCC) which will allow the proposed project to be developed for affordable apartment rental housing. It is noted that the list of exemptions is preliminary and subject to approval by the HHFDC and the Maui County Council. Since publication of the Draft Environmental Assessment (EA) and subsequent coordination with County of Maui agencies, the list of exemptions has been modified and reduced. Exemptions may be further modified as part of the Section 201H-

38 review and approval process. Refer to **Appendix "I"**. The proposed current exemptions are summarized below.

1. **MCC 2.80B General Plans and Community Plans.** Section 2.80B.070 sets out the requirements for and establishes the nine (9) community plans for the County. The subject property is designated "Future Growth Reserve" in the Wailuku-Kahului Community Plan Map. The appropriate land use designation for the proposed project is "Multi-Family". As such, an exemption from the requirements for a Community Plan Amendment (CPA) will be sought in order to expedite the development of the affordable rental units and meet affordable rental target thresholds.

2. **MCC 12.24A Landscape Planting and Beautification.** An exemption from the requirement to allow landscaping to be provided in accordance with the Conceptual Landscape Plan prepared by Landscape Architect Russell Y. Gushi. Refer to **Figure 3**.

3. **MCC 14.35 Wastewater Assessment Fees for Facility Expansion for the Wailuku/Kahului Wastewater Treatment System**. This exemption request will allow the project to receive its building permits without the need to pay wastewater assessment fees for the project in its entirety. Although Section 14.35.080, Exemptions, exempts County housing projects and facilities from the provisions of this chapter, the project is privately funded with 60% of the units falling within the affordability parameters of Chapter 2.96. This exemption clarifies that the applicant is seeking a waiver from the need to pay wastewater assessment fees for the entire 324 units of the project.

4. **MCC Title 16 Building and Construction**. An exemption from Chapter 16.04C, MCC, Fire Code, 16.18B, Electrical Code, 16.20B, Plumbing Code, and 16.26B, Building Code, will be sought to exempt the project from fire, electrical, plumbing and building permit fees, as well as plan review and inspection fees.

5-7. **MCC 16.26B Building Code.** Section 16.26B.3600 Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemptions will be sought to this section pertaining to the undergrounding of overhead utility lines; construction of curbs and gutters along Kuʻikahi Drive, Waiʻale Road, and Honoapiʻilani Highway; sidewalk and bike lane installation along Honoapiʻilani Highway; street lighting; and paving sidewalks using asphalt instead of concrete. The project will install sidewalks, bike lanes, and pedestrian crossing

improvements at those locations on Wai'ale Road and Ku'ikahi Drive as represented in the PER and which have been deemed essential by the Maui County Department of Public Works for public welfare and safety. Refer to **Figure 14** and **Appendix "B"**.

8. **MCC18.16.320 Parks and Playgrounds.** Pursuant to Section 18.16.320(I)(5) Park Assessment Fees are exempt for workforce housing projects. As sixty percent of the proposed project involves workforce housing units, this section of the MCC will exempt this portion of the project from the parks and playgrounds assessment fee. Nevertheless, the proposed project also includes four (4) small parks/playgrounds improvements that vary between 1,200 sq. ft. and 2,000 sq. ft. in size. As such, an exemption for the parks and playground assessment fee will be sought for the market portion of the project (i.e. 40 percent of the total units) since provisions for parks and playgrounds will be provided onsite.

9. **MCC 18.04 General Provisions and 18.16.020 Compliance.** An exemption from Section 18.04.030, MCC, Administration, and related land use consistency and conformity requirements of Title 18, shall be granted to exempt the project from obtaining a change in zoning and/or community plan amendment to enable subdivision approval. An exemption from MCC 18.16.020 shall be granted to exempt the project from General Plan conformity requirements.

10. **MCC 18.20 Subdivision Improvements.** An exemption from subdivision improvement requirements pursuant to Sections 18.20.040, 18.20.070, 18.20.080 as they relate to the urban standards for curbs, gutters and sidewalks for portions of the proposed project adjacent to Ku'ikahi Drive and Wai'ale Road will be sought (see Exemption No.5, above). Refer to **Figure 14** and **Appendix "B"**.

11. **MCC 19, Zoning**. An exemption from Chapter 19, MCC, is sought to permit the development and use of the parcel for multi-family residential use, recreational uses and structures, and accessory uses according to the permitted uses, accessory uses and buildings, and development standards of the A-2, Apartment District pursuant to the provisions set forth in Chapter 19.12, Apartment District. In addition, the Applicant is seeking an exemption to the setback requirements of the Apartment District to allow for a utility shed to encroach into the setback along Wai'ale Road.

12. **MCC 19.30A. Agricultural District**. An exemption from MCC 19.30A is sought to exempt the project from all provisions of this chapter.

13. **MCC 19.36A, Off-street Parking**. Section 19.36A.070 Walls, Fences and Landscaping, requires that one (1) shade tree at minimum regular intervals for

every five (5) spaces shall be provided within parking areas. An exemption will be requested from this section to allow for the flexibility in the placement of shade trees as set out in the proposed site plan. Refer to **Figure 3**. This will allow arrangement of the trees to be varied in order to provide more effective parking lot screening from the public streets while continuing to provide adequate shade.

14. **MCC 19.68 State Land Use District Boundaries; MCC 19.510 Application and Procedures; County of Maui Charter, Chapter 8, Department of Planning**. Each of the foregoing provisions of the MCC and County Charter sets forth specific procedures for the processing of a State District Boundary Amendment (DBA) for parcels having a land area of 15-acres or less. The Applicant is seeking exemptions from the foregoing provisions of the MCC and County Charter to enable the DBA request to proceed directly to the Maui County Council. Accordingly, the DBA request will not require the preparation of a DBA application as required by code, and will not require processing through the Maui Planning Commission. Instead, review and comment on the DBA request is being addressed through the Chapter 343, HRS process and the Section 201H process.

In summary, Section 201H-38, Hawai'i Revised Statutes, provides certain provisions for qualified affordable and/or workforce housing projects to be exempt from statutes, ordinances, charter provisions, rules of any government agency relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units, provided that the HHFDC finds the housing project is consistent with the purpose and intent of this chapter, and meets minimum requirements of health and safety. As such the above noted exemptions will be filed as part of the Wailuku Apartment Rental Housing Project 201H-38, HRS application with the HHFDC. These exemptions will expedite the delivery of affordable housing and assist the project meet the affordable workforce housing targets. The requested exemptions do not compromise the health and safety provisions of the proposed project.

ALTERNATIVES TO THE PROPOSED ACTION

V

V. ALTERNATIVES TO THE PROPOSED ACTION

The following is a discussion of the various development alternatives that have been considered by the Applicant as part of the planning process that will provide needed affordable and market rental multi-family housing units for Maui's families.

A. PREFERRED ALTERNATIVE

After studying market needs and in consultation with various local County officials, the proposed 324 affordable and market apartment rental units represent the preferred alternative. This alternative will help to address the critical demand for affordably priced apartment rental units for Maui's working families. As shared by the local officials and various stakeholders, the lack of housing on Maui has reached to a critical level that is now affecting the quality of life of the residents of Maui. As noted during the recent Maui Affordable Housing Summit held on June 30, 2017, the Director of County of Maui, Department of Housing and Human Concerns reported that the current yearly demand for housing on Maui is estimated at 1,400 units. It was also reported that the lack of workforce housing has contributed to Maui's homeless problem.

This preferred alternative to develop 324 affordable and market apartment rental units on the approximately 14.416-acre site as shown in the preliminary site plan (refer to **Figure 3**) will help meet this critical housing need on the Island of Maui. The proposed project consists of nine (9) 3-story buildings, with studio, 1-bedroom, 2-bedroom, and 3-bedroom units, ranging in size from approximately 400 square feet to 950 square feet.

The proposed 324 affordable and market apartment rental units are reasonably priced for families earning 80 percent to 140 percent of Maui's median income pursuant to HHFDC's affordable rent guidelines will help meet the housing shortage on Maui.

The preferred alternative will provide much needed workforce housing in a location that is available and underused, and in proximity to similar land uses.

B. AGRICULTURAL SUBDIVISION ALTERNATIVE

The Applicant evaluated the use of the project site as an agricultural subdivision based on the subject property's current land use designations. Based on the sliding scale pursuant to Chapter 19.30A.030, Maui County Code, Agricultural Zoning District, this scenario only produces a seven (7) agricultural lot subdivision. The use of the property for agricultural pursuits will, in the context of the Maui Island Plan, create an isolated agricultural parcel surrounded by urban uses. This scenario is not viewed as ideal from a land use compatibility standpoint. This option will not address the current critical demand for workforce housing for Maui's residents which is estimated to be 1,400 housing units per

year. The use of the property for affordable rental housing in a location served by infrastructure systems is considered a beneficial use of this land asset.

C. LOWER DENSITY ALTERNATIVE

The Applicant placed high priority on designing a project that is appropriate given the size and location of the subject property, existing residential/commercial character of the neighborhood, affordable rental thresholds and market rental parameters, and existing topography of the property. Initial design alternatives considered involved the study of spatial delineations and relationships among the residential buildings including lower building heights, provision of recreational amenities, which included four (4) park sites and site access and egress. Careful consideration was also given to view planes, open space amenities, building height relationships, and compatibility with the existing residential communities. Other factors considered included evaluation of the County zoning regulations and assessment of building heights and onsite parking requirements.

The lower density alternative will place less demand on public services, facilities, and resources, such as schools and parks. The lower density alternative will create fewer impacts on the environment from traffic and related infrastructure demands.

While a lower density alternative was deemed an appropriate consideration, developing a project with a lower density was not viewed as viable to address project need and related financing requirements. Upon final analysis, the lower density alternative was rejected in order to achieve the goal of addressing critical housing needs while assuring financial feasibility for the project, as represented by the Preferred Alternative, which spreads project costs over a greater number of units and achieves higher numbers of affordable rental units.

D. NO ACTION ALTERNATIVE

Under the "no action" alternative, the project site will not be developed for 324 affordable and market apartment rental units, and this no action alternative would involve the continued under-utilization of the 14.416-acre property. This alternative option will not address the current critical demand for housing for Maui's working families.

The development of the subject property presents a beneficial opportunity to develop affordable and market rental multi-family housing surrounded by compatible land uses. If the "no action" alternative were implemented, the project site would continue to be underutilized as temporary administrative offices related to construction and sales, surrounded by urban uses.

E. DEFERRED ACTION ALTERNATIVE

A deferral of the proposed project means that the action would be pursued at a later point in time, thus deferring the provision of new housing inventory to the island's market. The need for new housing inventory to address overcrowding and the rising costs of housing for local families is immediate. Additionally, deferring the project to a later point in time will likely result in higher development costs as labor and materials may be subject to inflationary pressures. Uncertainty as it relates to future cost scenarios places the project at risk from a financial feasibility standpoint. Thus, the deferral of action alternative is not considered to be viable.

SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

VI

VI. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

Assessment of construction-related impacts, noise and air quality impacts, and potential impacts on the physical and socio-economic environment, as well as a Cultural Impact Assessment and an Archaeological Assessment Report were carried out as part of the environmental assessment documentation process. The proposed development will have limited, unavoidable construction-related impact on the environment, as described in Chapter II.

In the short term, construction associated with the proposed project will have a temporary impact on air quality from dust generation and discharge of exhaust from construction equipment during ground altering activities and site grading. Appropriate BMPs will be incorporated to mitigate adverse construction-related impacts, including but not limited to, watering of exposed surfaces and regular maintenance of construction equipment.

Construction of the Wailuku Apartment Rental Housing Project will also generate unavoidable short-term noise impacts. The use of properly maintained construction equipment will mitigate noise impacts caused by equipment. The incorporation of State Department of Health construction noise limits and curfew times are measures to mitigate noise impacts caused by construction activities.

Existing traffic congestion along Honoapi'ilani Highway, Ku'ikahi Drive, and Wai'ale Road is expected to continue with or without the project due to the volume of school and commuter traffic during the morning and afternoon peak hours of traffic. Optimizing the signal timing plan at the Ku'ikahi Road/Wai'ale Road intersection is expected to accommodate the increase in turning movements from the anticipated developments in the area. The project will provide access and related intersection improvements to ensure that project-related traffic impacts can be mitigated. Refer to **Appendix "H"**.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

VII

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The proposed action will not entail a substantial commitment of public services or facilities. As an affordable rental housing development located adjacent to existing urban uses, the Wailuku Apartment Rental Housing Project will be served by existing infrastructure and will not extend County service areas. Development of the proposed project will involve a commitment of energy, labor, fiscal, and material resources. The use of these resources, when weighed against the expected benefit to be derived from the project, is not considered an adverse commitment.

STAKEHOLDER INFORMATION MEETINGS

VIII

VIII. STAKEHOLDER INFORMATION MEETINGS

A. SUMMARY OF OUTREACH ACTIVITIES

1. Waikapu Community Association

The Applicant held several community meetings with the Waikapu Community Association Members, consisting of members of the Waiolani Subdivision, the Waikapu Gardens Phases 1 and 2 Subdivisions, and Waikapu Town homeowners.

The Waikapu Community Association meeting with the officers and board members was held on June 6, 2017 at the Waikapu Community Center. At the meeting, a preliminary conceptual plan was presented for discussion. The project's traffic engineer explained that road improvements will be constructed at Wai'ale Road fronting the property and Ku'ikahi Drive to mitigate the anticipated traffic impact of the project. The Applicant also presented the preliminary floor plans as well as building plans with the elevations to address view plane considerations.

2. Kehalani Homeowners

A meeting was held with the Kehalani Homeowners' Board of Directors on May 16, 2017 to present a brief overview of the project. The traffic mitigation plan was also presented with the proposed crosswalk improvement mid-block on Ku'ikahi Drive in response to concerns raised by the association.

3. Ka Hale A Ke Ola and Hale Makana O Waiale

A meeting was also held on April 27, 2017 with Ms. Monique Yamashita, Executive Director, Ka Hale A Ke Ola and Hale Makana O Waiale, located northeast of the project site, to review the proposed project.

4. Faith Action Community Equity

A meeting was held with the members of the Faith Action Community Equity (F.A.C.E.) Maui – Affordable Housing Coalition on June 6, 2017 at Christ the King Church in Kahului. There were 22 coalition members in attendance at the meeting. The Applicant presented a brief summary and overview of the proposed project. There was a general consensus on the need for workforce rental housing for Maui's working families. Some concerns raised related to affordability, such as consideration of rents meeting 50 percent or below of Maui's median income. It was shared by the Applicant that since the project is not supported by government grants or subsidies, it will be financially difficult to develop such a rental project.

The target market for the proposed project is the gap group earning 80 percent to 140 percent of Maui's median income. The members also shared traffic concerns and the Applicant presented a mitigation plan to minimize the anticipated traffic impacts of the project.

5. Governmental Officials

In addition, the following local elected and agency officials were consulted in preparation of the Section 201H-38, HRS application and Environmental Assessment:

- Honorable Alan Arakawa - Mayor, County of Maui
- Honorable Michael White – Chair, Maui County Council
- Honorable Robert Carroll – Vice Chair, Maui County Council
- Honorable Alika Atay – Councilmember
- Honorable Elle Cochran – Councilmember
- Honorable Stacy Crivello - Councilmember
- Honorable Don Guzman – Councilmember
- Honorable Kelly King – Councilmember
- Honorable Yuki Lei Sugimura – Councilmember
- Ms Carol Reimann – Director, Maui Department of Housing and Human Concerns
- Mr. David Goode – Director, Maui Department of Public Works
- Ms Rowena Dagdag Andaya – Deputy Director, Maui Department of Public Works
- Mr. Clayton Yoshida – Planning Program Administrator, Maui Department of Planning

LIST OF PERMITS AND APPROVALS

IX

IX. LIST OF PERMITS AND APPROVALS

The following permits and approvals may be required prior to the implementation of the project:

State of Hawai'i, Department of Health

1. Chapter 11-46, Community Noise Control, as applicable
2. Chapter 11-60.1-33, Fugitive Dust
3. National Pollution Discharge Elimination System (NPDES) Permit, as applicable
4. Section 201H-38, Hawai'i Revised Statutes (HRS) (Hawaii Housing Finance and Development Corporation Recommendation to Maui County Council)

County of Maui

1. Construction permits (i.e., building and grading permits)
2. Section 201H-38, HRS (Maui County Council approval)
3. State Land Use Commission District Boundary Amendment (Council approval)

SIGNIFICANCE CRITERIA ASSESSMENT

X

X. SIGNIFICANCE CRITERIA ASSESSMENT

The "Significance Criteria", defined in Section 12 of the Chapter 11-200 of the Hawai'i Administrative Rules, were reviewed and analyzed to determine whether the proposed project will have significant impacts to the environment. The following criteria and analyses are provided.

1. **Involves an irrevocable commitment to loss or destruction of any natural or cultural resources.**

   There are no known rare, threatened, or endangered species of flora, fauna, avifauna, or important habitats located within the project site. As mentioned previously, an Archaeological Assessment Report (AAR) for the project site concluded that the majority of the subject property has been previously impacted during prior land disturbances. Precautionary archaeological monitoring will be carried out during ground altering activities. Should archaeological features, cultural artifacts, or human burials be located during construction activities, work in the immediate area of the find shall be promptly halted and the find protected from further disturbance. The State Historic Preservation Division (SHPD) will be immediately contacted to determine the significance of the find and establish appropriate mitigative measures, as necessary.

2. **Significantly curtails the range of beneficial uses of the environment.**

   The proposed action is located adjacent to existing urban uses, and the commitment of land resources will not curtail the range of beneficial uses of the environment. The project site is currently underutilized to house temporary trailer offices. The proposed use of the property for affordable and market rental housing is compatible with surrounding urban uses. Additionally, in the context of the Wailuku-Kahului Community Plan and the Maui Island Plan, the property is envisioned to be a part of the County General Plan's urban fabric. In this regard, the property holds potential value for urban-related uses, rather remaining as an agricultural parcel surrounded by urban uses. Other fallow agricultural lands in Central Maui provide more appropriate opportunities for sustaining agricultural productivity.

3. **Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.**

   The proposed action does not conflict with the policies and guidelines of Chapter 344, HRS. An environmental assessment is being carried out to ensure the proposed project will not have adverse impacts on the environmental resources.

4. **Substantially affects the economic welfare, social welfare, and cultural practices of the community, or State.**

The proposed action will have a beneficial effect on the local economy during construction. In the long term, the proposed project will support the local economy through the contribution of salaries, wages, and benefits, as well as through the purchases of goods and services from local merchants and service providers. The project will provide affordable rental housing to families in Maui County. As such, the proposed project is deemed to be a socio-economic benefit for island residents.

5. **Substantially affects public health.**

No adverse impact to public health or welfare is anticipated as a result of the proposed action.

6. **Involves substantial secondary impacts, such as population changes or effects on public facilities.**

The proposed Wailuku Apartment Rental Housing Project will provide market and affordable rental housing in close proximity to jobs, goods and services located in Central Maui. The project is anticipated to service existing Maui residents and is not anticipated to involve substantial secondary impacts due to population change. The proposed project is in close proximity to existing residential and commercial neighborhoods and will be served by existing infrastructure and will not extend County service areas. As such, secondary impacts on public facilities are not anticipated.

7. **Involves a substantial degradation of environmental quality.**

No substantial degradation of environmental quality resulting from the action is anticipated. Best Management Practices (BMPs) and appropriate erosion control measures will be utilized during the construction period. Drainage system improvements will be constructed in accordance with applicable regulatory design standards to ensure that surface runoff will not have an adverse effect on adjacent or downstream properties.

Any potential short-term impacts to air and noise quality during the construction phase of the project, will be mitigated through employing BMPs. In the long term, the project will not adversely impact air quality and ambient noise.

8. **Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.**

The proposed development is located on land currently housing temporary trailer offices which is adjacent to existing commercial and residential neighborhoods. The proposed action is a stand-alone project, and does not represent a commitment for larger actions. While traffic conditions in the vicinity of the project site may have specific movements that operate at lower Levels of Service, these are recognized as existing conditions. Addition of project-related traffic may result in incremental additional delays, or slightly higher volume to capacity ratios. However, for the most part, Levels of Service are not detrimentally affected. The Applicant will provide traffic mitigation measures to help address traffic impacts. Refer to **Appendix "H"**. As a result, the project is not expected to result in cumulative impacts on the environment.

9. **Substantially affects a rare, threatened, or endangered species, or its habitat.**

No rare, threatened, or endangered species of flora, fauna, avifauna, or important habitats were identified on the property. The project will not substantially affect rare, threatened, or endangered species, or its habitat. There are no documented observations pertaining to the occurrence of listed species or designated critical habitat within the vicinity of the proposed project.

10. **Detrimentally affects air or water quality or ambient noise levels.**

Construction activities may pose a temporary short-term impact on air and noise quality; however, impacts will be mitigated through the use of BMPs. Dust control measures, such as regular watering and sprinkling, will be implemented to minimize wind-blown emissions. Noise impacts will be mitigated by limiting construction to daylight work hours. Utilizing approved BMPs, significant impacts to water quality are not anticipated.

In the long term, the proposed action is not anticipated to have a significant adverse impact on air and water quality or ambient noise levels.

11. **Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.**

According to the FEMA FIRMs currently in effect, the project site falls within Zone X, an area of minimal flooding. A site specific drainage review of the property indicated the existing natural drainageway (gully) and the man-made drainage channel crossing the project site are within potential 100-year stormflow limits. The potential flooding hazard from the under-sized natural drainageway will be

mitigated either by (1) improving the drainageway to increase its capacity of (2) constructing an earthen levee or concrete flood barrier to confine stormwater to the gully. Refer to **Appendix "B"**.

The project site is situated inland and is not anticipated to have any adverse impact upon coastal waters or resources, beaches, estuaries, or other fresh water bodies. The project site is located outside of the tsunami inundation zone. Drainage improvements will be designed to retain runoff in accordance with County drainage and stormwater rules and regulations. During construction, recommended BMPs will be implemented for erosion and sedimentation control to minimize potential impacts to water quality.

12. **Substantially affects scenic vistas and viewplanes identified in county or state plans or studies.**

The proposed development will not block established scenic vistas, viewplanes, or corridors. The project is located inland away from coastal and open space areas and will not substantially affect coastal scenic or open space resources. A view analysis for the project has been prepared. Refer to **Appendix "F"**.

13. **Requires substantial energy consumption.**

The proposed action will involve the short-term commitment of fuel for equipment, vehicles, and machinery during construction activities. However, this use is not anticipated to result in a substantial consumption of energy resources. In the long term, the project will create an additional demand for electricity. However, this demand will not be substantially or excessively more than the energy consumed by similar developments throughout the region. The Applicant is exploring the option of installing photovoltaic electrical systems in the project to reduce consumption of electrical energy.

In summary, the project site is situated in an existing urban community, in close proximity to services and commercial areas in the Wailuku and Kahului regions. This project will be served by existing infrastructure, and will not extend County service areas. The proposed development is not anticipated to have a significant adverse impact on the physical, cultural and socio-economic environments. The site is suitable for the development for multi-family housing and will help Maui County meet the housing needs of the region. Based on the preceding analysis in this Final EA document, and in accordance with the significance criteria set forth in 11-200-12, HAR, the proposed project has been determined to qualify as a finding of no significant impact (FONSI).

COMMENT LETTERS RECEIVED ON THE ORIGINAL DRAFT ENVIRONMENTAL ASSESSMENT PUBLISHED IN THE SEPTEMBER 23, 2017 ENVIRONMENTAL NOTICE

XI

XI. COMMENT LETTERS RECEIVED ON THE ORIGINAL DRAFT ENVIRONMENTAL ASSESSMENT PUBLISHED IN THE SEPTEMBER 23, 2017 ENVIRONMENTAL NOTICE

As noted in the Preface to this document, the original Draft Environmental Assessment (EA) prepared by Bagoyo Development Consulting Group was published in the Office of Environmental Quality Control's (OEQC) September 23, 2017 edition of the Environmental Notice. During the 30-day comment period for the original Draft EA, written comments were received from the agencies, organizations and individuals listed below. Each of these agencies, organizations and individuals have been provided an opportunity to submit additional early consultation comments. The request for additional early consultation comments, as well as the comment letters and responses (prepared by Bagoyo Development Consulting Group) for the original Draft EA are included in this chapter.

FEDERAL AGENCIES

1. Tunis W. McElwain, Acting Chief
   U.S. Department of the Army
   U.S. Army Engineer District, Honolulu
   Regulatory Branch, Building 230
   Fort Shafter, Hawai'i 96858-5440

STATE AGENCIES

2. Christina Kishimoto,
   Superintendent
   State of Hawai'i
   Department of Education
   P.O. Box 2360
   Honolulu, Hawai'i 96804

3. Virginia "Ginny" Pressler, MD, MBA, FACS, Director
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   Department of Health
   919 Ala Moana Blvd., Room 300
   Honolulu, Hawai'i 96814

4. Laura McIntyre, AICP
   State of Hawai'i
   Department of Health
   Environmental Planning Office
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5. Suzanne Case, Chairperson
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   Honolulu, Hawai'i 96809

6. Alan Downer, Administrator
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   Department of Land and Natural Resources
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7. Jade Butay, Interim Director
   State of Hawai'i
   Department of Transportation
   869 Punchbowl Street
   Honolulu, Hawai'i 96813

8. Vern T. Miyagi, Administrator
   Hawai'i Emergency Management
   Office of Director of Emergency Management
   Civil Defense
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   Honolulu, Hawai'i 96816

9. Dr. Kamana'opono Crabbe,
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10. Leo R. Asuncion, Jr., AICP,
Director
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11. Dan Orodenker, Executive Officer
State of Hawai'i
State Land Use Commission
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Honolulu, Hawai'i 96804

COUNTY AGENCIES

12. Stewart Stant, Director
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13. Jeffrey A. Murray, Chief
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14. Carol Reimann, Director
County of Maui
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2200 Main Street, Suite 546
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15. Ka'ala Buenconsejo, Director
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16. William Spence, Director
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17. Tivoli Faaumu, Chief
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18. David Goode, Director
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19. Don Medeiros, Director
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20. David Taylor, Director
County of Maui
Department of Water Supply
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ORGANIZATIONS

21. Albert Perez, Executive Director
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22. Donnie McGean
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23. Richard "Dick" Mayer
1111 Lower Kimo Drive
Kula, Hawai'i 96790

24. Wallette Garcia Pellegrino
1420 Kilohi Street
Wailuku, Hawai'i 96793

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Tunis W. McElwain, Acting Chief
Regulatory Branch
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch, Building 230
Fort Shafter, Hawai'i 96858-5440

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. McElwain:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 • Honolulu, Hawaii 96813 • Tel: 808.983.1233
www.munekiyohiraga.com

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

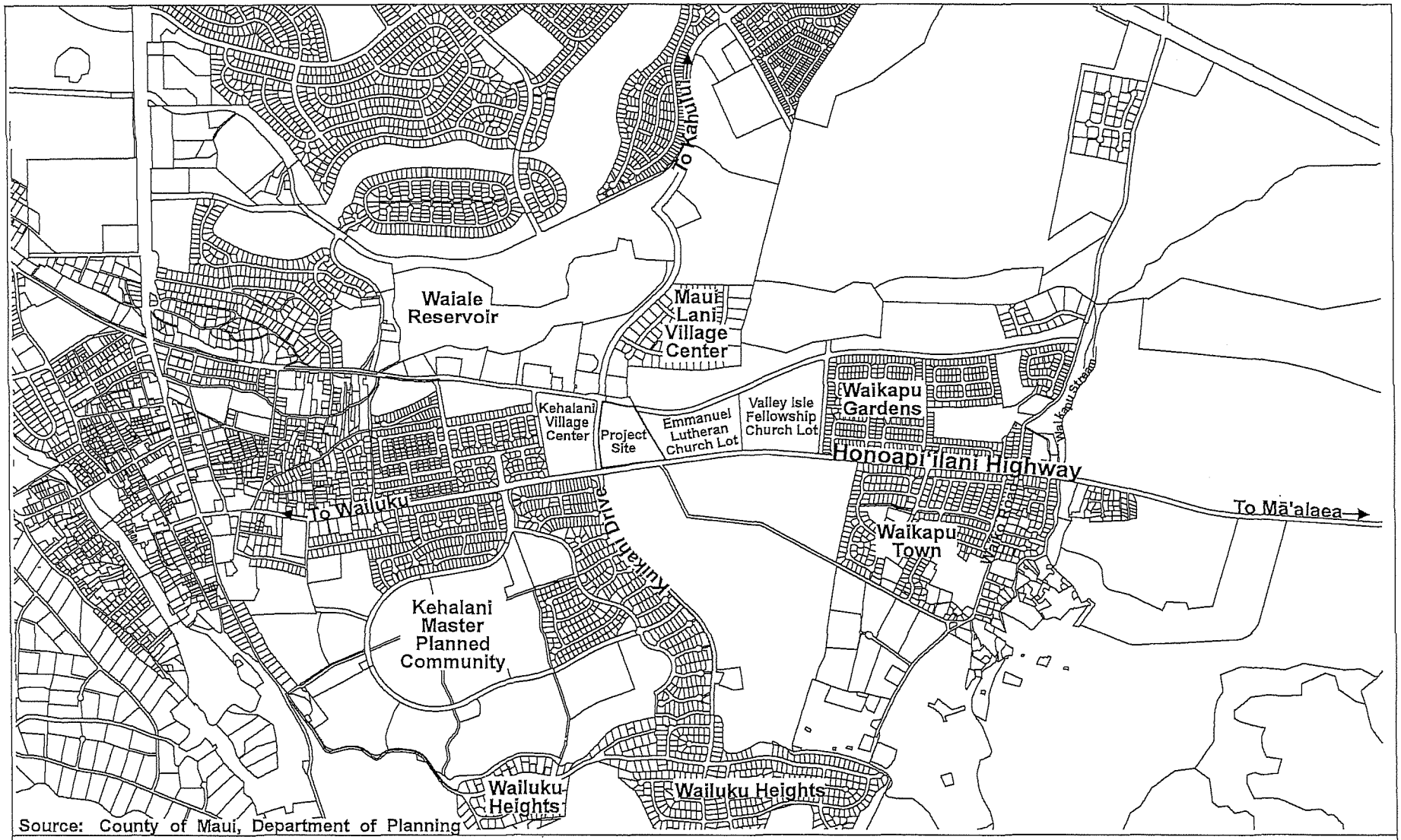
Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc



Source: County of Maui, Department of Planning

Figure 1

Wailuku Apartment Rental Housing Project

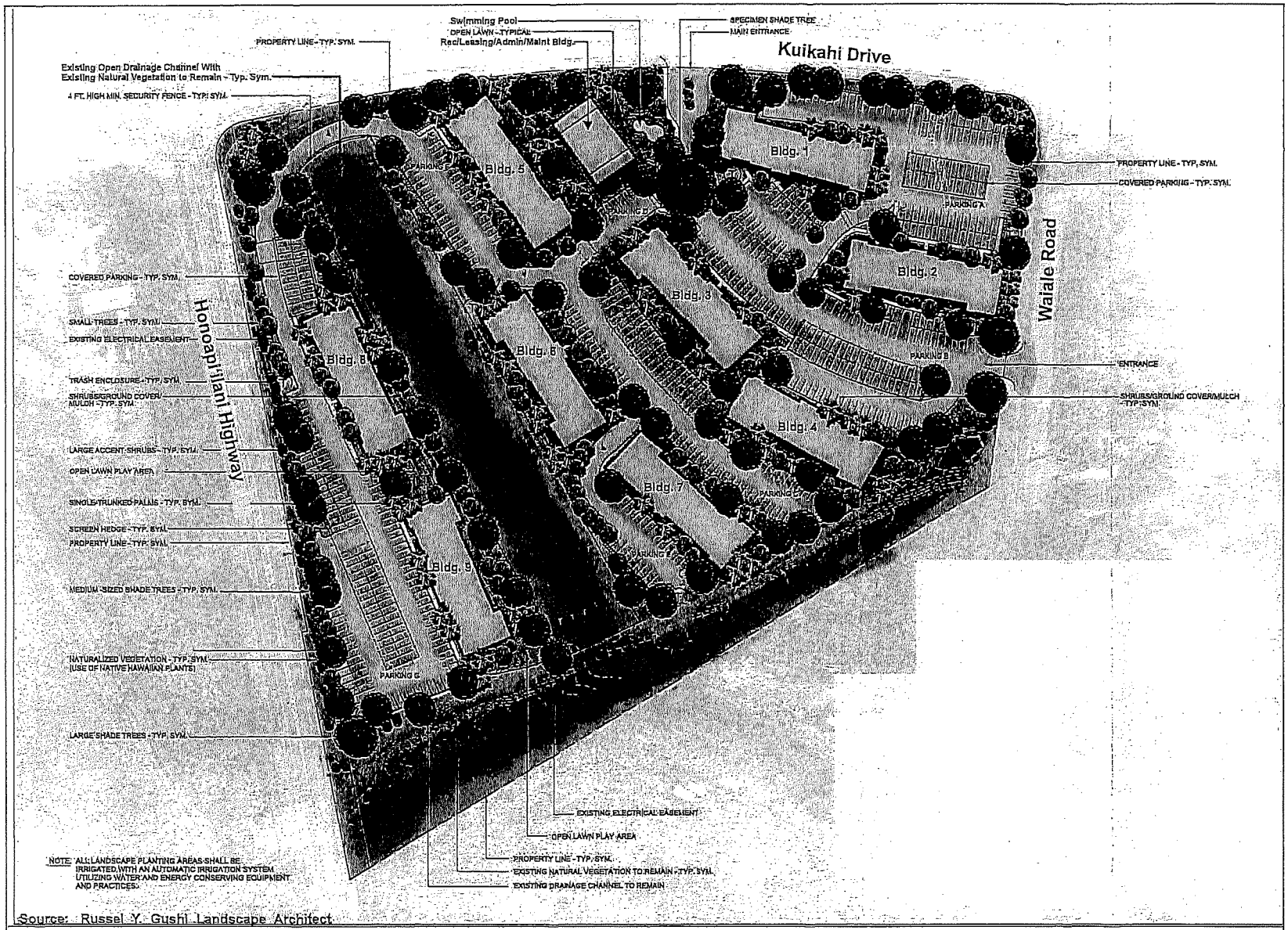
Regional Location Map

0 500 1,000 2,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\WailukuAfford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

From: McElwain, Tunis W CIV USARMY CEPOH (US)
Sent: Tuesday, September 19, 2017 7:52 AM
To: vbagoyo-devgroup@hawaii.rr.com
Subject: Wailuku Apartment Rental Housing Project TMK (2) 3-5-001:064

Dear Vince Bagoyo,

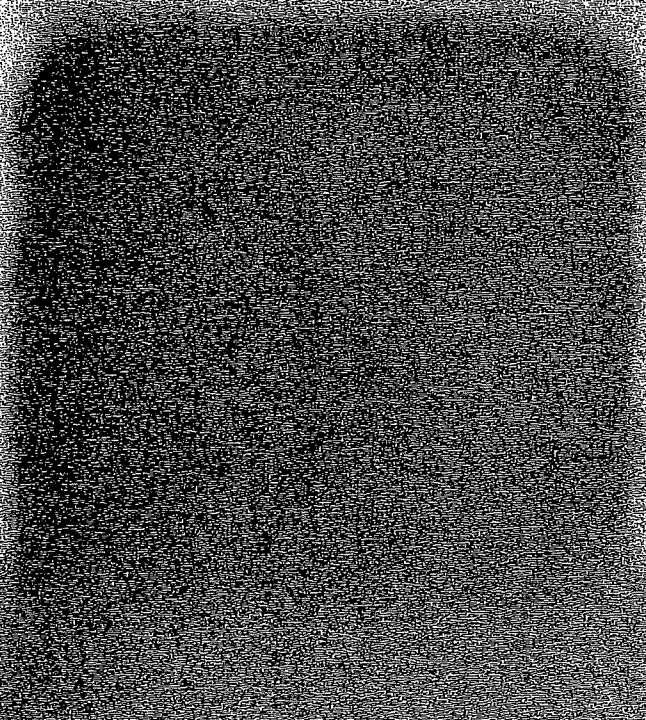
Thank you for your submittal of a draft Environmental Assessment for the proposed Wailuku Apartment Rental Housing Project on Maui. If your project proposes to discharge fill material into a Water of the United States (WOUS), you will need to submit a permit application. If you are unsure if your project contains a WOUS you may request a jurisdictional determination. More information about the process can be found on our website at the address below:

http://www.poh.usace.army.mil/Missions/Regulatory.aspx

Sincerely,

Tunis McElwain
Chief Regulatory Branch
Honolulu District
U.S. Army Corps of Engineers

Desk Phone: 808-835-4300



Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

January 24, 2018

Mr. Tunis McElwain
Chief Regulatory Branch – Honolulu District
U.S. Army Corps of Engineers
Fort Shafter, Hawaii 96858-5440

Dear Mr. McElwain

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2)3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

Your comments have been forwarded to the engineering consultant for review and will be addressed in the new EA.

Again, thank you for your comments. Your letter and this response letter will be included in the new EA to be prepared. If additional clarification is required, please contact me at (808) 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Christine Kishimoto, Superintendent
State of Hawai'i
Department of Education
P.O. Box 2360
Honolulu, Hawai'i 96804

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Kishimoto:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

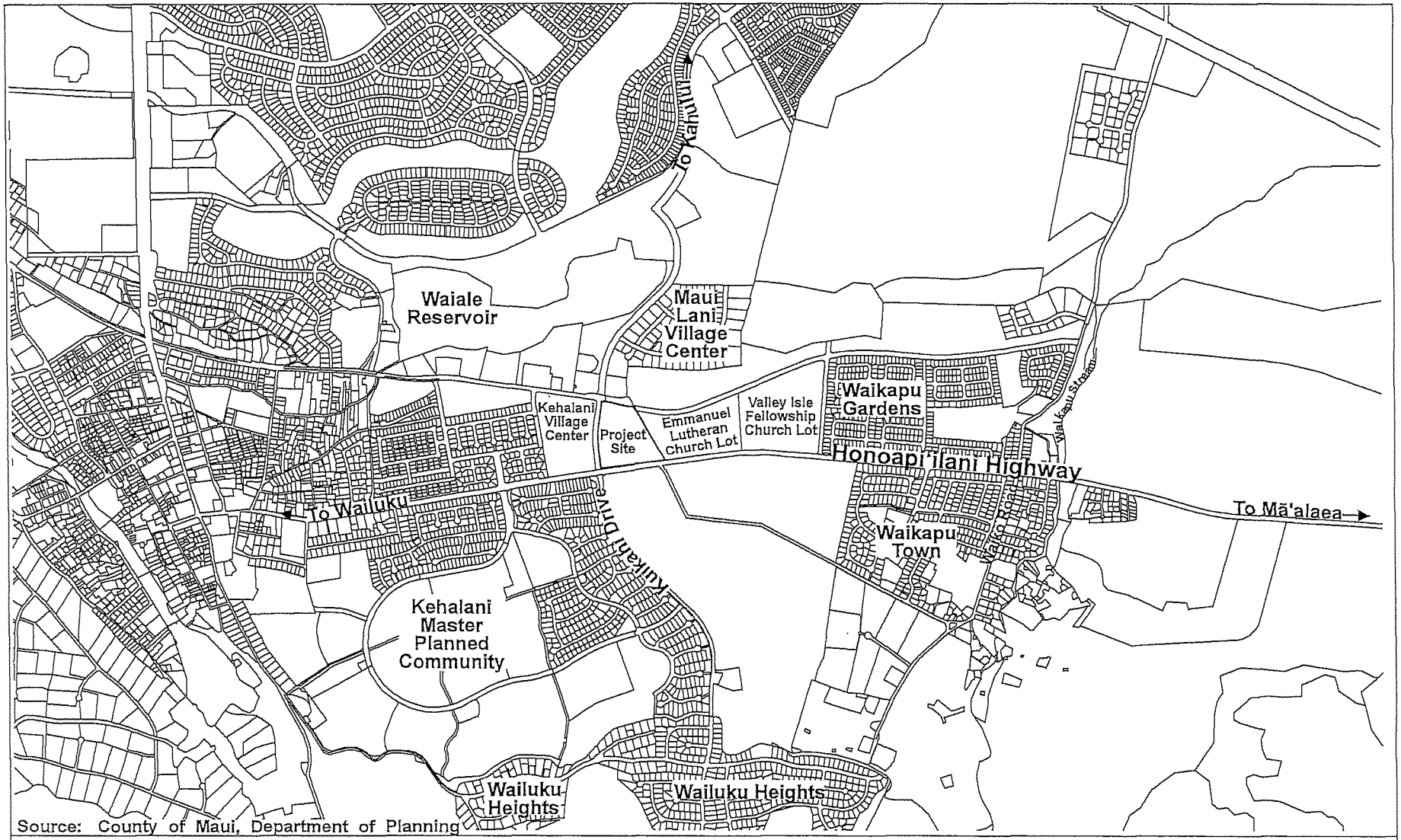


Figure 1

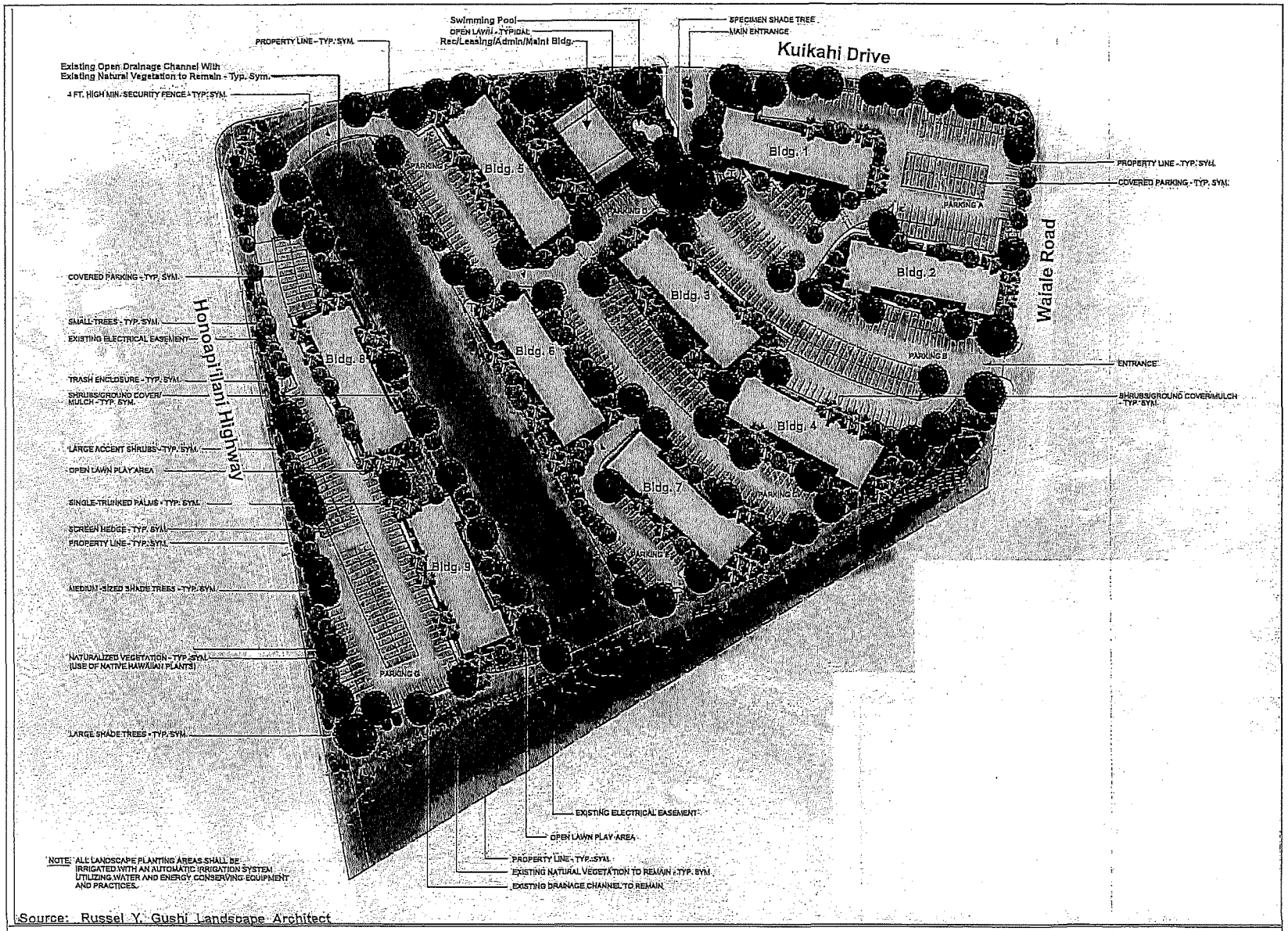
Wailuku Apartment Rental Housing Project
Regional Location Map

0 500 1,000 2,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DAVID Y. IGE
GOVERNOR

DR. CHRISTINA M. KISHIMOTO
SUPERINTENDENT

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI'I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

October 18, 2017

Mr. Vince Bagoyo
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo

Re: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project, Waiale Road, Wailuku, Maui, Hawaii - TMK: (2)3-5-001:064

The Department of Education (DOE) has reviewed the Draft Environmental Assessment (DEA) for the proposed Wailuku Apartment Rental Housing Project (Project) and would like to offer a few important comments.

Page 5 of the DEA states, "The Applicant, in coordination with HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes." The DOE has determined that that the Project is located within the Central Maui School Impact District which was designated by the Board of Education on November 18. 2010 pursuant to Chapter 302A-1604, Hawaii Revised Statutes (HRS).

The DOE would like to clarify that except as permitted by HRS Chapter 302A-1603, the Project will not be exempted from school impact fees. A portion of this section of statute was recently amended to read as follows: "(a) Except as provided in subsection (b), any person who seeks to develop a new residential development within a designated school impact district requiring: (1) A county subdivision approval; (2) A county building permit; or (3) A condominium property regime approval for the project, shall be required to fulfill the land component impact fee or fee in lieu requirement and construction cost component impact fee requirement of the department, including all government housing projects and projects processed pursuant to sections 46-15.1 and 201H-38."

The Applicant is encouraged to contact Heidi Meeker, of the Department of Education Facilities Development Branch, at 784-5095 to discuss the negotiation of an Educational Contribution Agreement wherein specific terms and conditions of school impact fees will be documented.

We would also like to offer a correction to Page 37 where the 2015 enrollment for Maui Waena Intermediate School is noted as 1043. The DOE's official enrollment for the 2015 school year at Maui Waena Intermediate School is 1143.

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Kenneth G. Masden II
Public Works Manager
Planning Section
Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804

Dear Mr. Masden:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 18, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

The DOE would like to clarify that except as permitted by HRS Chapter 302A-1603, the Project will not be exempted from school impact fees. A portion of this section of statute was recently amended to read as follows: "(a) Except as provided in subsection (b), any person who seeks to develop a new residential development within a designated school impact district requiring: (1) A county subdivision approval; (2) A county building permit; or (3) A condominium property regime approval for the project, shall be required to fulfill the land component impact fee or fee in lieu requirement and construction costs component impact fee requirement of the department, including all government housing projects and projects processed pursuant to sections 46-15.1 and 201H-38."

Response to comment:

The applicant is aware of the requirement for school impact fees and will contact the Department of Education to discuss this matter further.

Comment:

We would also like to offer a correction to Page 37 where the 2015 enrollment for Maui Waena Intermediate School is noted as 1043. The DOE's official enrollment for the 2015 school year at Maui Waena Intermediate School is 1143.

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Response to comment:

We acknowledge the DOE's correction of the 2015 school enrollment figures. As the new EA is prepared we will utilize the most current school enrollment figures that are available.

Again, thank you for your comments. Your letter and this response letter will be included in the new EA to be prepared. If additional clarification is required, please contact me at (808) 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

Enclosure

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Virginia "Ginny" Pressler, MD, MBA, FACS, Director
State of Hawai'i
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawai'i 96814

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Dr. Pressler:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

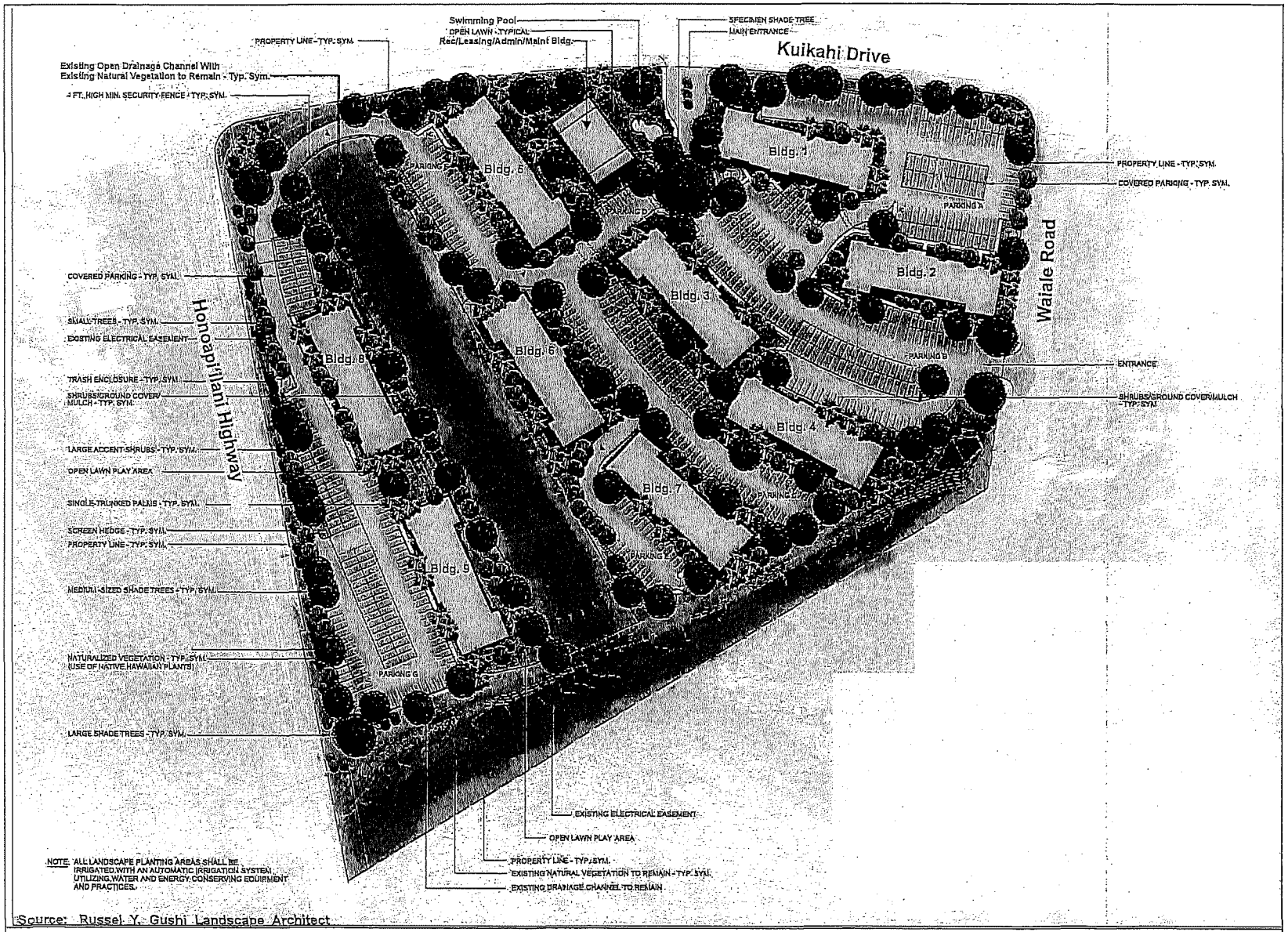
Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

EPO 17-243

October 20, 2017

Mr. Vince Bagoyo
V. Bagoyo Development Consulting Group, LLC
1500 Kilinoe Place
Wailuku, Hawaii 96793
Email: vbagoyo-devgroup@hawaii.rr.com

Dear Mr. Bagoyo:

SUBJECT: Draft Environmental Assessment (DEA) for Wailuku Apartment Rental Housing at Waiale Road, Wailuku, Maui
TMK: (2) 3-5-001:064

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your DEA to our office via the OEQC link:
http://oeqc2.doh.hawaii.gov/EA_EIS_Library/2017-09-23-MA-DEA-Wailuku-Apartment-Rental-Housing.pdf

We understand from the OEQC publication form project summary that *"The proposed project consists of 9 apartment buildings, with maximum height of 38'. The project also includes related improvements such as grading, construction of internal roadways, utilities, and resident amenities such as a recreation center with swimming pool and children's play areas."*

Hawaii's environmental review laws require Environmental Assessments (EAs) and Environmental Impact Statements (EISs) to consider health in the discussion and the mitigation measures to reduce negative impacts. In its definition of 'impacts,' §11-200-2, Hawaii Administrative Rules (HAR) includes health effects, whether primary (direct), secondary (indirect), or cumulative. Further, §11-200-12(b)(5), HAR, lists public health as one of the criteria for determining whether an action may have a significant impact on the environment.

We advocate that you consider health from a broad perspective; one that accounts for the social, economic, and environmental determinants of health and wellbeing. Community well-being can be impacted by access to physical activity, health care, feelings of social connectedness and safety. Design solutions that take these factors into consideration positively contribute to the social determinants of health in a community, improving the well-being of those who live there by influencing health promoting behaviors. Social determinants contribute to preventable chronic diseases such as asthma, diabetes, obesity, and cardiovascular disease.

In the development and implementation of all projects, EPO strongly recommends regular review of State and Federal environmental health land use guidance. State standard comments to support sustainable healthy design are provided at: http://health.hawaii.gov/epo/landuse. Projects are required to adhere to all applicable standard comments.

If temporary fugitive dust emissions could be emitted when the project site is prepared for construction and/or when construction activities occur, we recommend you review the need and/or requirements for a Clean Air Branch (CAB) permit (HAR, Chapter 11-60.1 "Air Pollution Control"). Effective air pollution control measures need to be provided to prevent or minimize any fugitive dust emissions caused by construction work from affecting the surrounding areas. This includes the off-site roadways used to enter/exit the project. The control measures could include, but are not limited to, the use of water wagons, sprinkler systems; and dust fences. For questions contact the Clean Air Branch via e-mail at: Cab.General@doh.hawaii.gov or call (808) 586-4200.

Any waste generated by the project (that is not a hazardous waste as defined in state hazardous waste laws and regulations), needs to be disposed of at a solid waste management facility that complies with the applicable provisions (HAR, Chapter 11-58.1 "Solid Waste Management Control"). The open burning of any of these wastes, on or off site, is strictly prohibited. You may wish you review the Minimizing Construction & Demolition Waste Management Guide at: http://health.hawaii.gov/shwb/files/2016/05/constdem16.pdf Additional information is accessible at: http://health.hawaii.gov/shwb. For specific questions call (808) 586-4226.

If noise created during the construction phase of the project may exceed the maximum allowable levels (HAR, Chapter 11-46, "Community Noise Control") then a noise permit may be required and needs to be obtained before the commencement of work. Relevant information is online at: http://health.hawaii.gov/irhb/noise EPO recommends you contact the Indoor and Radiological Health Branch (IRHB) at (808) 586-4700 with any specific questions.

A phase I Environmental Site Assessment (ESA) and site investigation should be conducted for residential development or redevelopment projects in current or formerly used industrial areas and on formerly and currently zoned agricultural land used for growing sugar, pineapple or other agricultural products. If the investigation shows that a release of petroleum, hazardous substance, pollutants or contaminants may have occurred at the site, the site should be properly characterized through an approved Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response Office (HEER) soil and/or groundwater sampling plan. Please refer to Sections 3 and 4 of the HEER Office Technical Guidance Manual http://www.hawaildoh.org. If the site is found to be contaminated, then all removal and remedial actions to clean up hazardous substance or oil releases by past and present owners/tenants must comply with State Law (HRS, Chapter 128D, "Environmental Response Law", Chapter 451, "State Contingency Plan"). To identify HEER records related to the property, visit http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/public-records. For information on site assessment and cleanup programs review: http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/site-assessment-and-cleanup-programs. Any specific questions should be directed to the HEER office at (808) 586-4249.

EPO also encourages you to examine and utilize the Hawaii Environmental Health Portal at: https://eha-cloud.doh.hawaii.gov. This site provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings.

To better protect public health and the environment, the U.S. Environmental Protection Agency (EPA) has developed an environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. EPO encourages you to explore, launch and utilize this powerful tool in planning your project. The EPA EJSCREEN tool is available at: http://www.epa.gov/ejscreen.

We hope this information is helpful. If you have any questions please contact us at DOH.epo@doh.hawaii.gov or call us at (808) 586-4337. Thank you for the opportunity to comment.

Mahalo nui loa,

Laura Leialoha Phillips McIntyre, AICP
Program Manager, Environmental Planning Office

LM:nn

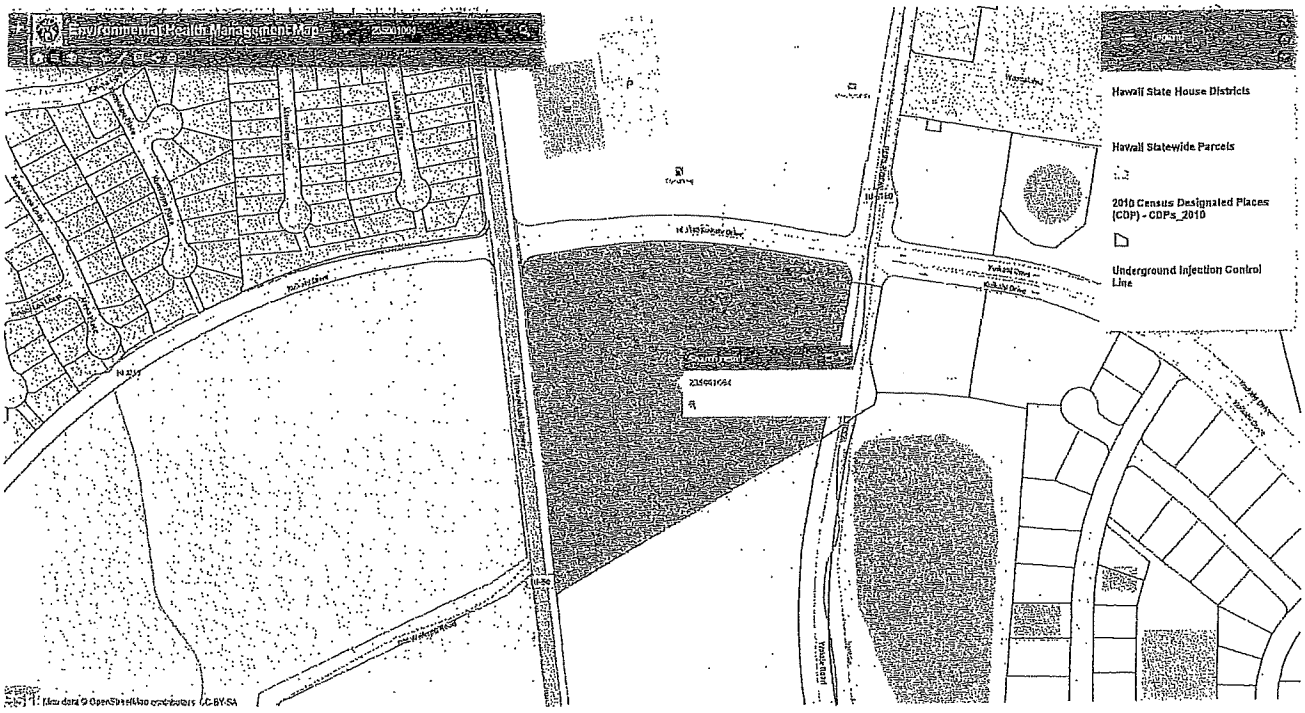
c: Ken Takahashi, HHFDC (via email: ken.t.takahashi@hawaii.gov)
DOH: DHO Maui, CWB, CAB, WWB, IRHB, HEER (via email only)

Attachment 1: Environmental Health Management Web App Snipit of Project Area: http://health.hawaii.gov/epo/egis
Attachment 2: U.S. EPA EJSCREEN Report for Project Area

Please be advised:
The Environmental Planning Office (EPO), along with the Clean Air, Clean Water, and Wastewater Branches will be moving in December 2017. The new address, for EPO, **as of January 1, 2018**, will be:
Environmental Planning Office, DOH, Hale Ola, 2827 Waimano Home Road #109, Pearl City, Hawaii 96782
Please feel free to come and visit our new offices anytime. Please note that there is a security guard at the bottom of the hill (before entering DOH property). Our office phone numbers, email and website will all remain the same.



Attachment 1: Environmental Health Management Web App Snipit of Project Area: http://health.hawaii.gov/epo/egis



Attachment 2: U.S. EPA EJSCREEN Report for Project Area

EPA United States Environmental Protection Agency

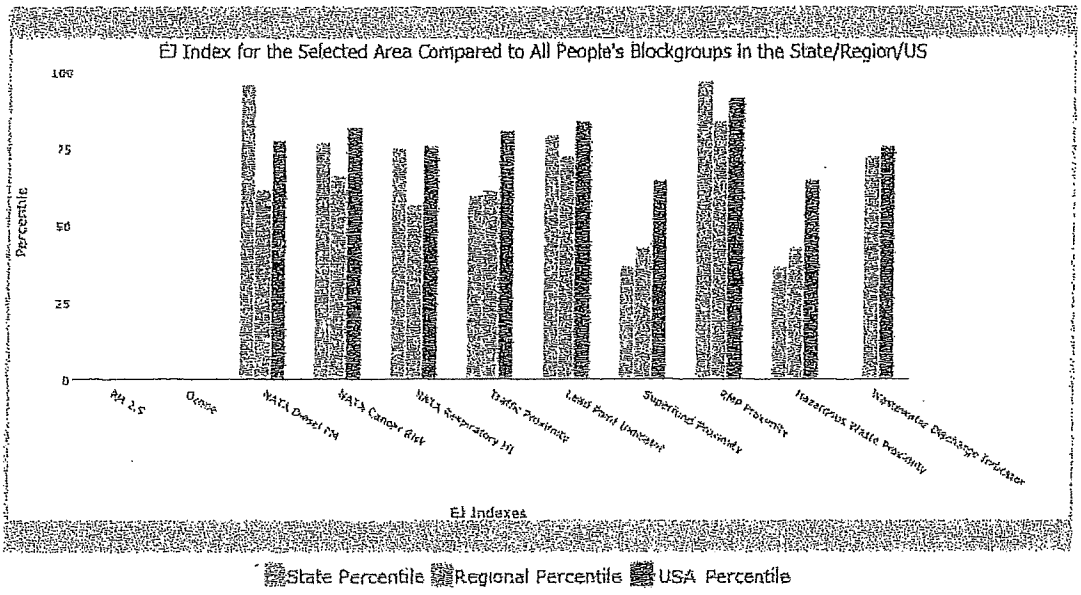
EJSCREEN Report (Version 2017)

1 mile Ring Centered at 20.870006,-156.501659, HAWAII, EPA Region 9

Approximate Population: 10,469

Input Area (sq. miles): 3.14

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	N/A	N/A	N/A
EJ Index for Ozone	N/A	N/A	N/A
EJ Index for NATA* Diesel PM	96	62	78
EJ Index for NATA* Air Toxics Cancer Risk	77	66	82
EJ Index for NATA* Respiratory Hazard Index	75	57	76
EJ Index for Traffic Proximity and Volume	60	62	81
EJ Index for Lead Paint Indicator	80	73	84
EJ Index for Superfund Proximity	37	43	66
EJ Index for RMP Proximity	97	84	92
EJ Index for Hazardous Waste Proximity	37	43	65
EJ Index for Wastewater Discharge Indicator	N/A	73	76



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

1 mile Ring Centered at 20.870006,-156.501659, HAWAII, EPA Region 9

Approximate Population: 10,469

Input Area (sq. miles): 3.14



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EPA United States Environmental Protection Agency

EJSCREEN Report (Version 2017)

1 mile Ring Centered at 20.870006,-156.501659, HAWAII, EPA Region 9

Approximate Population: 10,469

Input Area (sq. miles): 3.14

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	N/A	N/A	N/A	9.9	N/A	9.14	N/A
Ozone (ppb)	N/A	N/A	N/A	41.8	N/A	38.4	N/A
NATA* Diesel PM (µg/m³)	0.439	0.149	94	0.978	<50th	0.938	<50th
NATA* Cancer Risk (lifetime risk per million)	32	34	51	43	<50th	40	<50th
NATA* Respiratory Hazard Index	0.89	1	49	2	<50th	1.8	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	170	1000	51	1100	42	590	59
Lead Paint Indicator (% Pre-1960 Housing)	0.16	0.16	60	0.24	52	0.29	45
Superfund Proximity (site count/km distance)	0.0061	0.1	22	0.15	5	0.13	1
RMP Proximity (facility count/km distance)	1.6	0.39	96	0.98	82	0.73	87
Hazardous Waste Proximity (facility count/km distance)	0.0063	0.1	26	0.12	2	0.093	2
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	0.04	N/A	13	59	30	40
Demographic Indicators							
Demographic Index	54%	51%	58	47%	61	36%	76
Minority Population	81%	77%	46	59%	71	38%	85
Low Income Population	24%	26%	52	36%	37	34%	38
Linguistically Isolated Population	3%	6%	47	9%	33	5%	60
Population With Less Than High School Education	6%	9%	47	17%	30	13%	34
Population Under 5 years of age	7%	6%	62	7%	57	6%	61
Population over 64 years of age	14%	16%	43	13%	64	14%	54

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment

For additional information, see: www.epa.gov/environmentaljustice

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Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Laura Leialoha Phillips McIntyre, AICP
Program Manager, Environmental Planning Office
State of Hawaii
Department of Health
Post Office Box 3378
Honolulu, Hawaii 96801-3378

Dear Ms. McIntyre:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 20, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

We advocate that you consider health from a broad perspective; one that accounts for the social, economic, and environmental determinants of health and wellbeing. Community well-being can be impacted by access to physical activity, healthcare, feelings of social connectedness and safety. Design solutions that take these factors into consideration positively contribute to the social determinants of health in a community, improving the well-being of those who live there by influencing health promoting behaviors. Social determinants contribute to preventable chronic diseases such as asthma, diabetes, obesity, and cardiovascular disease.

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Response to comment:

As recommended, your comments have been forwarded to the applicant for review.

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A phase I Environmental Site Assessment (ESA) and site investigation should be conducted for residential development or redevelopment projects in current or formerly used industrial areas and on

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

formerly and currently zoned agricultural land used for growing sugar, pineapple or other agricultural products.

Response to comment:

A Phase I Environmental Site Assessment (ESA) has been completed by the ~~current~~ landowner on March 7, 2016 by Bureau Veritas. The assessment revealed no evidence of recognized environmental conditions. There has been past agricultural use but the State of Hawaii Department of Health (DOH), Hazard Evaluation and Emergency Response (HEER) Office subsequently issued a No Further Action Determination letter for the subject property.

The new EA will include a summary of the findings of the Phase I ESA and a copy of the ESA will be included in the appendices.

Again, thank you for your comments. Your letter and this response letter will be included in the new EA to be prepared. If additional clarification is require, please contact me at (808) 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

Enclosure

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

In reply, refer to:

18:DEV/010

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning Project Management Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Laura McIntyre, AICP
State of Hawai'i
Department of Health
Environmental Planning Office
919 Ala Moana Blvd., Suite 312
Honolulu, Hawai'i 96814

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. McIntyre:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

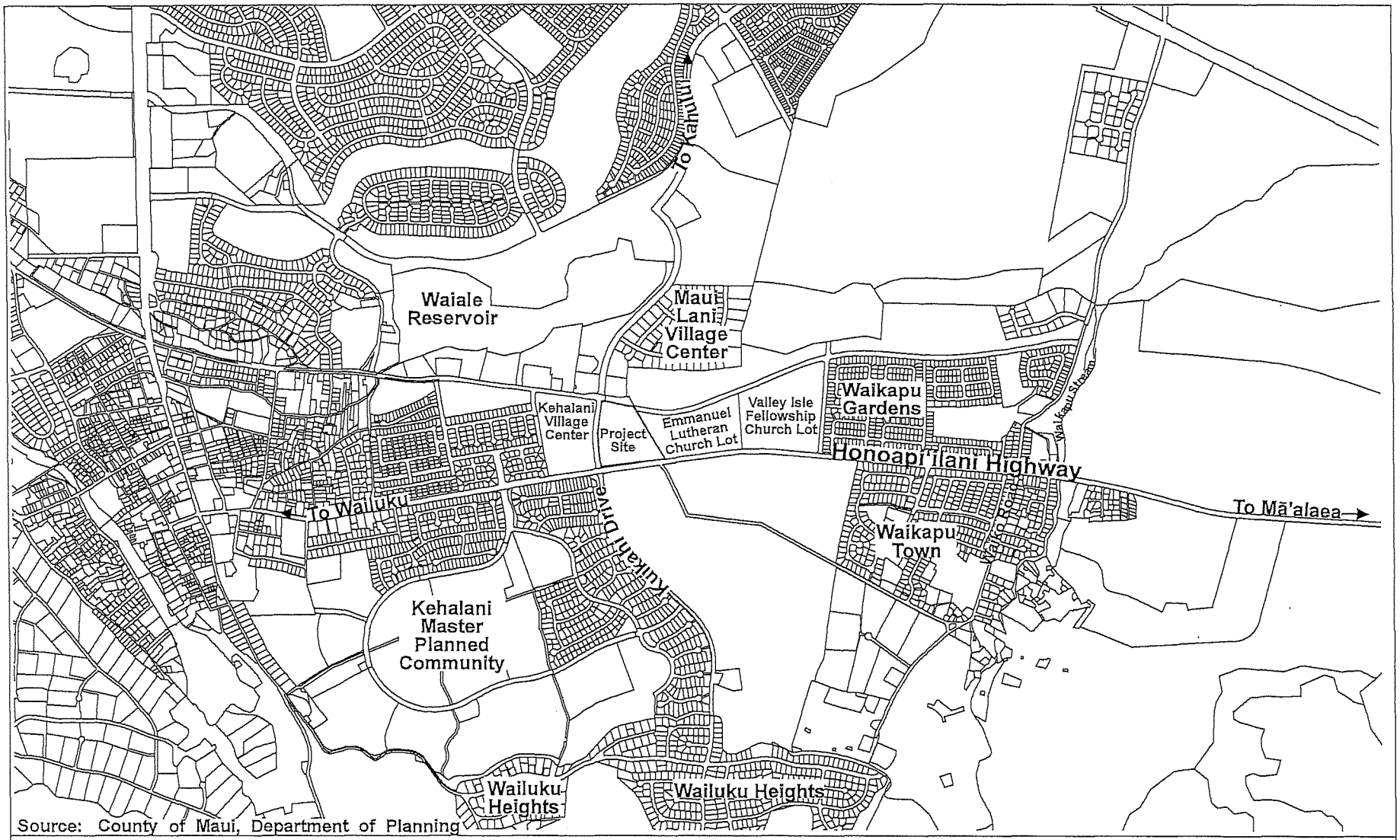
Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc



Source: County of Maui, Department of Planning

Figure 1

Wailuku Apartment Rental Housing Project

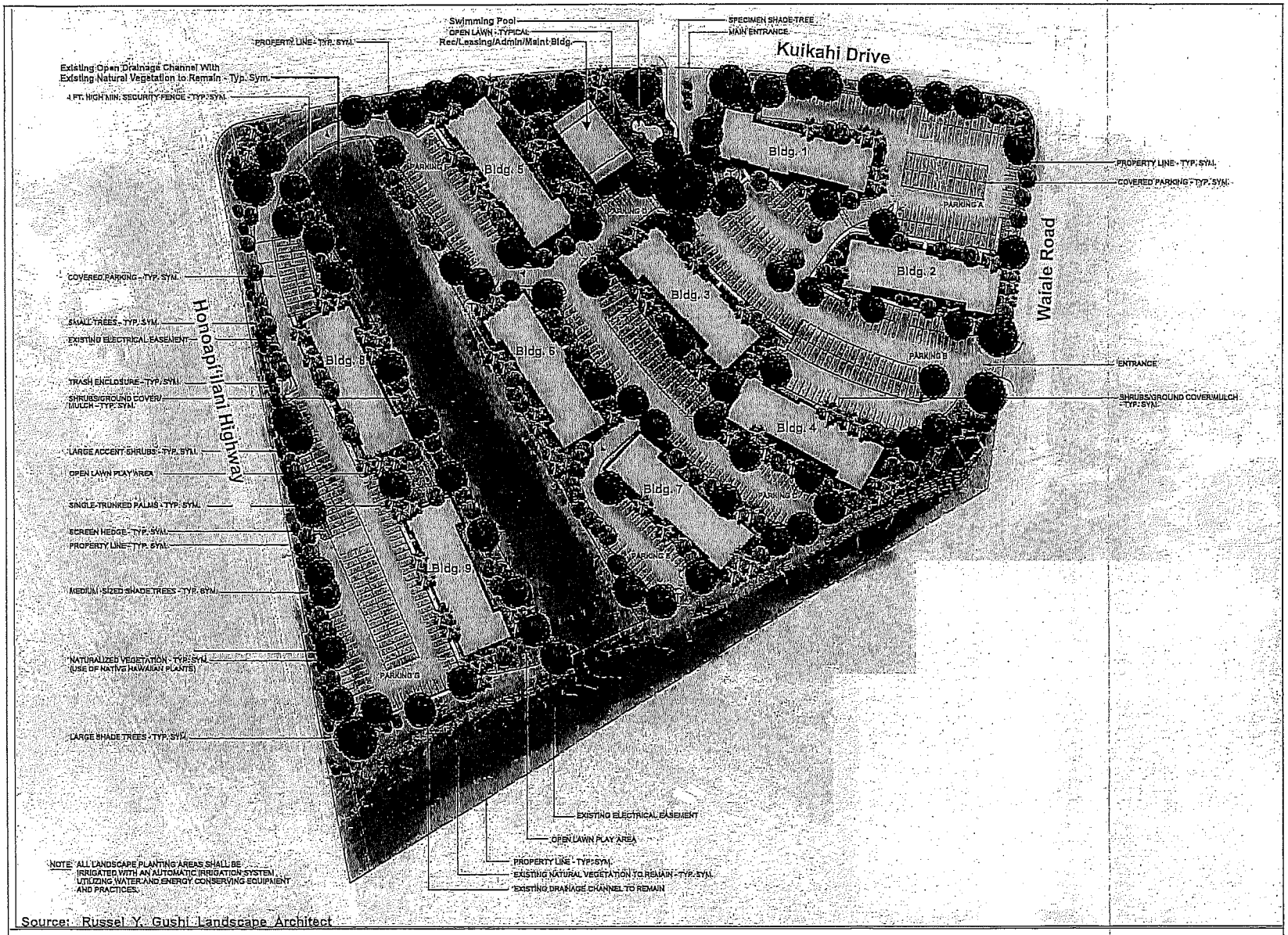
Regional Location Map

1,000 0 Feet 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

EPO 17-243

October 20, 2017

Mr. Vince Bagoyo
V. Bagoyo Development Consulting Group, LLC
1500 Kilinoe Place
Wailuku, Hawaii 96793
Email: ybagoyo-devgroup@hawaii.rr.com

Dear Mr. Bagoyo:

SUBJECT: Draft Environmental Assessment (DEA) for Wailuku Apartment Rental Housing at Waiale Road, Wailuku, Maui
TMK: (2) 3-5-001:064

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your DEA to our office via the OEQC link:
http://oeqc2.doh.hawaii.gov/EA_EIS_Library/2017-09-23-MA-DEA-Wailuku-Apartment-Rental-Housing.pdf

We understand from the OEQC publication form project summary that *"The proposed project consists of 9 apartment buildings, with maximum height of 38'. The project also includes related improvements such as grading, construction of internal roadways, utilities, and resident amenities such as a recreation center with swimming pool and children's play areas."*

Hawaii's environmental review laws require Environmental Assessments (EAs) and Environmental Impact Statements (EISs) to consider health in the discussion and the mitigation measures to reduce negative impacts. In its definition of 'impacts,' §11-200-2, Hawaii Administrative Rules (HAR) includes health effects, whether primary (direct), secondary (indirect), or cumulative. Further, §11-200-12(b)(5), HAR, lists public health as one of the criteria for determining whether an action may have a significant impact on the environment.

We advocate that you consider health from a broad perspective; one that accounts for the social, economic, and environmental determinants of health and wellbeing. Community well-being can be impacted by access to physical activity, health care, feelings of social connectedness and safety. Design solutions that take these factors into consideration positively contribute to the social determinants of health in a community, improving the well-being of those who live there by influencing health promoting behaviors. Social determinants contribute to preventable chronic diseases such as asthma, diabetes, obesity, and cardiovascular disease.

In the development and implementation of all projects, EPO strongly recommends regular review of State and Federal environmental health land use guidance. State standard comments to support sustainable healthy design are provided at: http://health.hawaii.gov/epo/landuse. Projects are required to adhere to all applicable standard comments.

If temporary fugitive dust emissions could be emitted when the project site is prepared for construction and/or when construction activities occur, we recommend you review the need and/or requirements for a Clean Air Branch (CAB) permit (HAR, Chapter 11-60.1 "Air Pollution Control"). Effective air pollution control measures need to be provided to prevent or minimize any fugitive dust emissions caused by construction work from affecting the surrounding areas. This includes the off-site roadways used to enter/exit the project. The control measures could include, but are not limited to, the use of water wagons, sprinkler systems, and dust fences. For questions contact the Clean Air Branch via e-mail at: Cab.General@doh.hawaii.gov or call (808) 586-4200.

Any waste generated by the project (that is not a hazardous waste as defined in state hazardous waste laws and regulations), needs to be disposed of at a solid waste management facility that complies with the applicable provisions (HAR, Chapter 11-58.1 "Solid Waste Management Control"). The open burning of any of these wastes, on or off site, is strictly prohibited. You may wish you review the Minimizing Construction & Demolition Waste Management Guide at: http://health.hawaii.gov/shwb/files/2016/05/constdem16.pdf Additional information is accessible at: http://health.hawaii.gov/shwb. For specific questions call (808) 586-4226.

If noise created during the construction phase of the project may exceed the maximum allowable levels (HAR, Chapter 11-46, "Community Noise Control") then a noise permit may be required and needs to be obtained before the commencement of work. Relevant information is online at: http://health.hawaii.gov/irhb/noise EPO recommends you contact the Indoor and Radiological Health Branch (IRHB) at (808) 586-4700 with any specific questions.

A phase I Environmental Site Assessment (ESA) and site investigation should be conducted for residential development or redevelopment projects in current or formerly used industrial areas and on formerly and currently zoned agricultural land used for growing sugar, pineapple or other agricultural products. If the investigation shows that a release of petroleum, hazardous substance, pollutants or contaminants may have occurred at the site, the site should be properly characterized through an approved Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response Office (HEER) soil and/or groundwater sampling plan. Please refer to Sections 3 and 4 of the HEER Office Technical Guidance Manual http://www.hawaiidoh.org. If the site is found to be contaminated, then all removal and remedial actions to clean up hazardous substance or oil releases by past and present owners/tenants must comply with State Law (HRS, Chapter 128D, "Environmental Response Law", Chapter 451, "State Contingency Plan"). To identify HEER records related to the property, visit http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/public-records. For information on site assessment and cleanup programs review: http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/site-assessment-and-cleanup-programs. Any specific questions should be directed to the HEER office at (808) 586-4249.

EPO also encourages you to examine and utilize the Hawaii Environmental Health Portal at: https://eha-cloud.doh.hawaii.gov. This site provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings.

To better protect public health and the environment, the U.S. Environmental Protection Agency (EPA) has developed an environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. EPO encourages you to explore, launch and utilize this powerful tool in planning your project. The EPA EJSCREEN tool is available at: http://www.epa.gov/ejscreen.

We hope this information is helpful. If you have any questions please contact us at DOH.epo@doh.hawaii.gov or call us at (808) 586-4337. Thank you for the opportunity to comment.

Mahalo nui loa,

Laura Leialoha Phillips McIntyre, AICP
Program Manager, Environmental Planning Office

LM:nn

c: Ken Takahashi, HHFDC (via email: ken.t.takahashi@hawaii.gov)
DOH: DHO Maui, CWB, CAB, WWB, IRHB, HEER (via email only)

Attachment 1: Environmental Health Management Web App SnipIt of Project Area: http://health.hawaii.gov/epo/egis
Attachment 2: U.S. EPA EJSCREEN Report for Project Area

Please be advised:
The Environmental Planning Office (EPO), along with the Clean Air, Clean Water, and Wastewater Branches will be moving in December 2017. The new address, for EPO, as of January 1, 2018, will be:
Environmental Planning Office, DOH, Hale Ola, 2827 Waimano Home Road #109, Pearl City, Hawaii 96782
Please feel free to come and visit our new offices anytime. Please note that there is a security guard at the bottom of the hill (before entering DOH property). Our office phone numbers, email and website will all remain the same.



Attachment 1: Environmental Health Management Web App Snipit of Project Area: http://health.hawaii.gov/epo/egis



Attachment 2: U.S. EPA EJSCREEN Report for Project Area

EPA United States Environmental Protection Agency

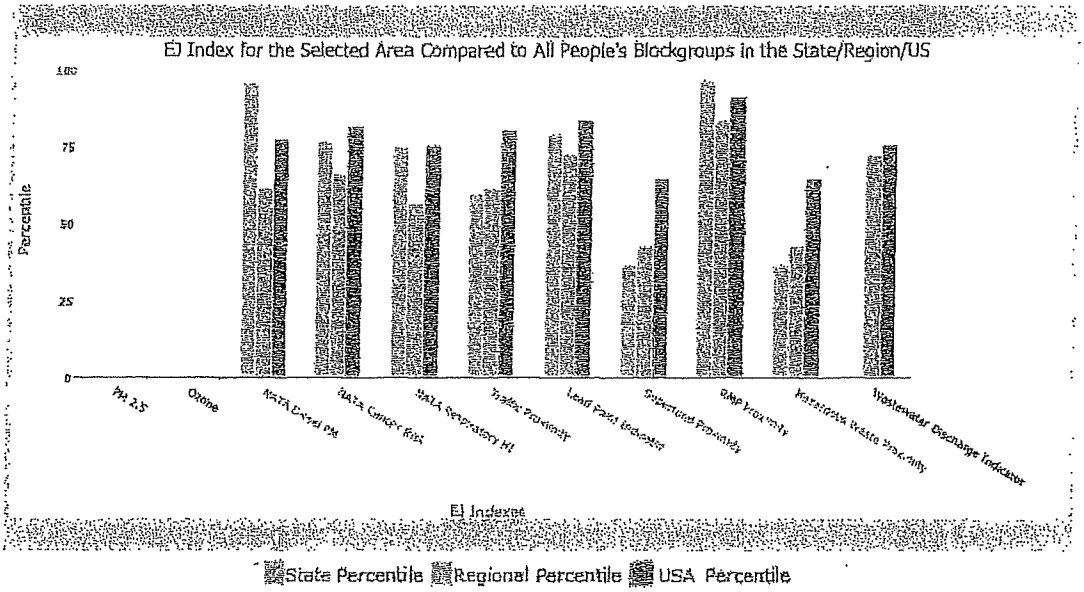
EJSCREEN Report (Version 2017)

1 mile Ring Centered at 20.870006,-156.501659, HAWAII, EPA Region 9

Approximate Population: 10,469

Input Area (sq. miles): 3.14

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	N/A	N/A	N/A
EJ Index for Ozone	N/A	N/A	N/A
EJ Index for NATA* Diesel PM	96	62	78
EJ Index for NATA* Air Toxics Cancer Risk	77	66	82
EJ Index for NATA* Respiratory Hazard Index	75	57	76
EJ Index for Traffic Proximity and Volume	60	62	81
EJ Index for Lead Paint Indicator	80	73	84
EJ Index for Superfund Proximity	37	43	65
EJ Index for RMP Proximity	97	84	92
EJ Index for Hazardous Waste Proximity	37	43	65
EJ Index for Wastewater Discharge Indicator	N/A	73	76



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 85th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJSCREEN Report (Version 2017)

1 mile Ring Centered at 20.870006,-156.501659, HAWAII, EPA Region 9

Approximate Population: 10,469

Input Area (sq. miles): 3.14



October 5, 2017

Geolized Point

1:4,514

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EPA United States Environmental Protection Agency

EJSCREEN Report (Version 2017)

1 mile Ring Centered at 20.870006,-156.501659, HAWAII, EPA Region 9

Approximate Population: 10,469

Input Area (sq. miles): 3.14

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	N/A	N/A	N/A	9.9	N/A	9.14	N/A
Ozone (ppb)	N/A	N/A	N/A	41.8	N/A	38.4	N/A
NATA* Diesel PM (µg/m³)	0.439	0.149	94	0.978	<50th	0.938	<50th
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Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Laura Leialoha Phillips McIntyre, AICP
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State of Hawaii
Department of Health
Post Office Box 3378
Honolulu, Hawaii 96801-3378

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

formerly and currently zoned agricultural land used for growing sugar, pineapple or other agricultural products.

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Sincerely,

V. Bagoyo Development Consulting Group, LLC

Enclosure

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

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If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Suzanne Case, Chairperson
State of Hawai'i
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawai'i 96809

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Case:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 • Honolulu, Hawaii 96813 • Tel: 808.983.1233
www.munekiyohiraga.com

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

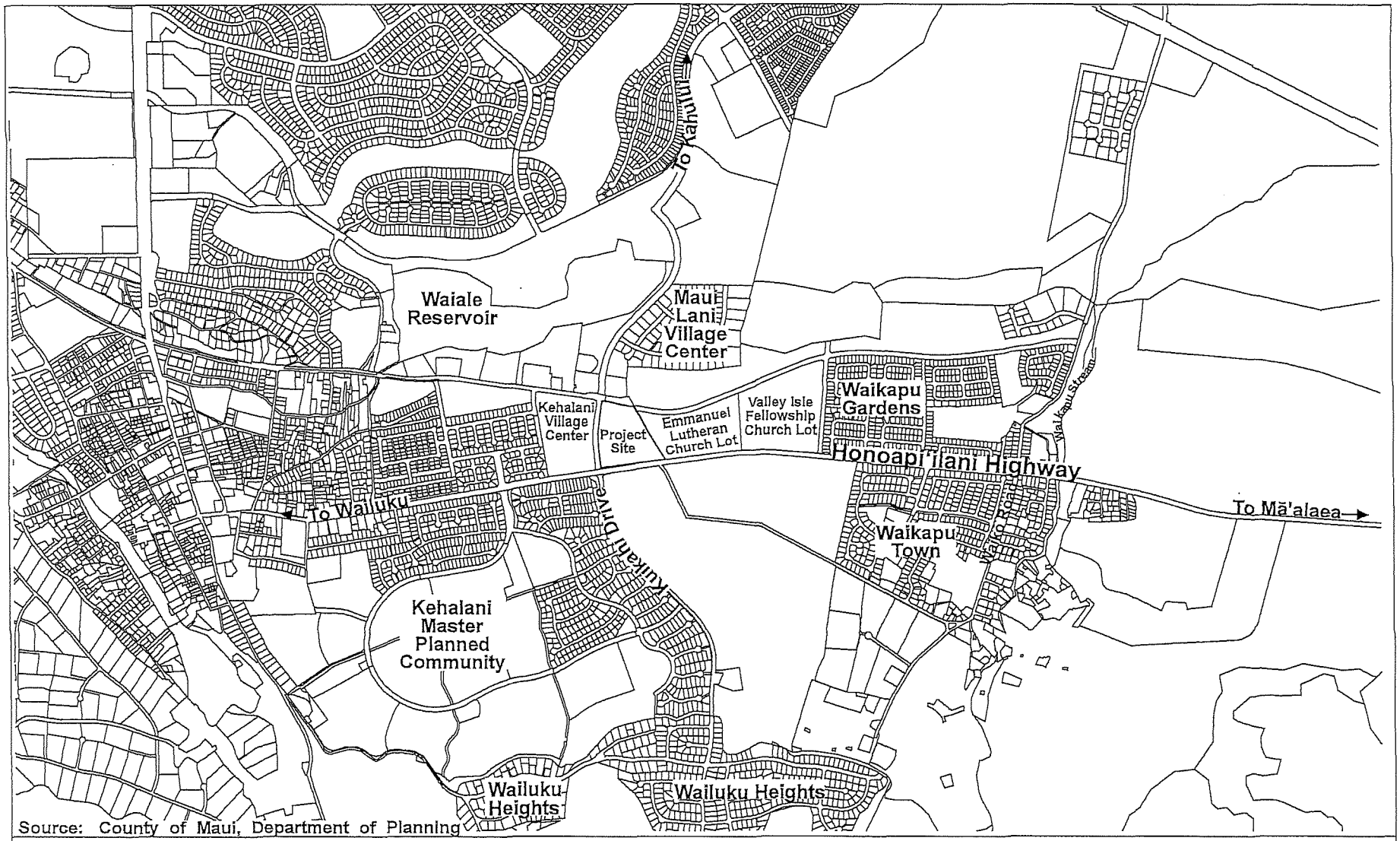


Figure 1

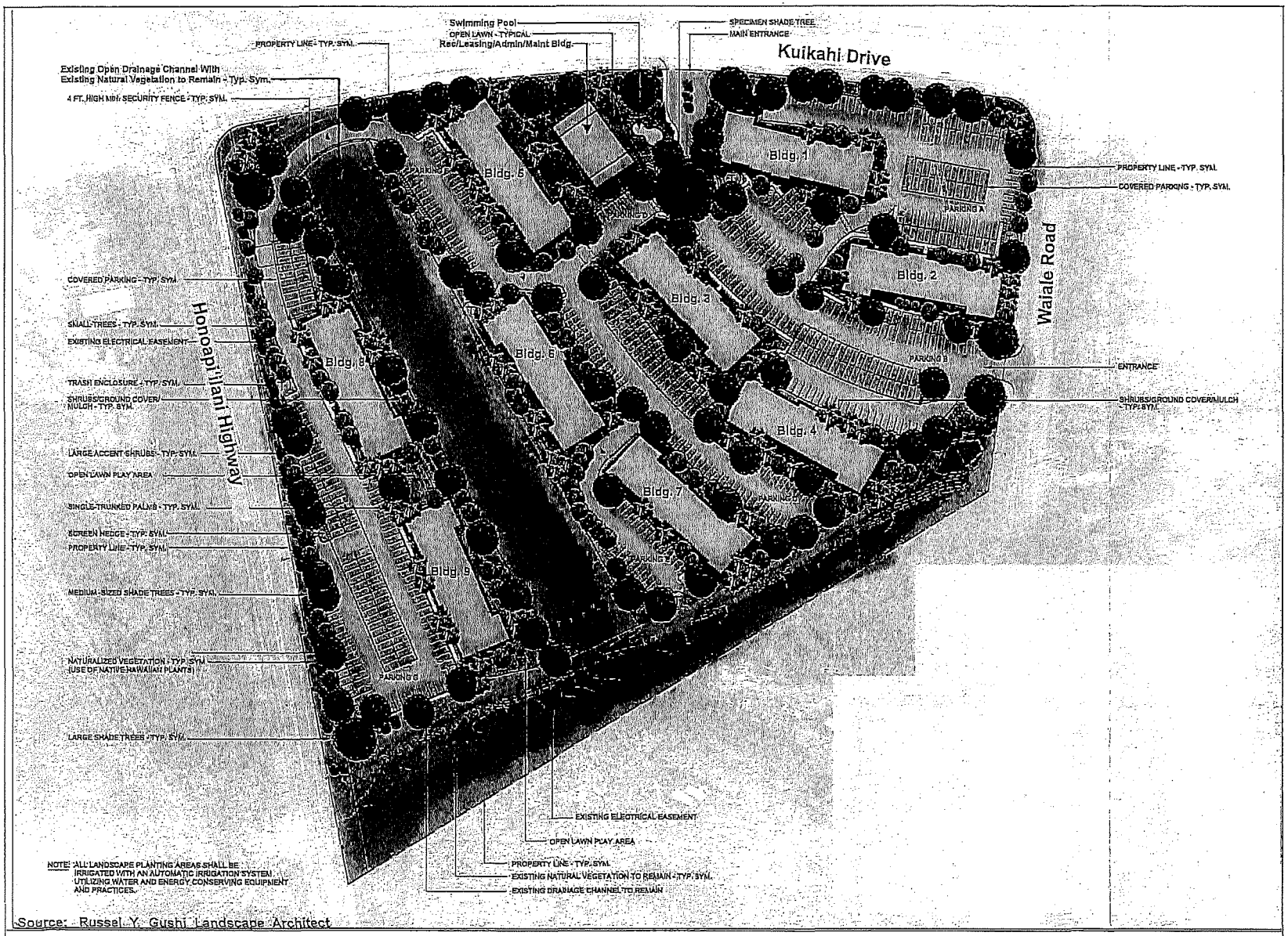
Wailuku Apartment Rental Housing Project
Regional Location Map

1,000 0 Feet 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project
Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
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

October 24, 2017

Bagoyo Development Consulting Group
Attention: Mr. Vince Bagoyo
1500 Kilinoe Place
Wailuku, Hawaii 96793

via email: vbagoyo-devgroup@hawaii.rr.com

Dear Mr. Bagoyo:

SUBJECT: Draft Environmental Assessment and Anticipated FONSI for the Proposed **Wailuku Apartment Rental Housing Project** located at Waiale Road, Wailuku, Island of Maui; TMK: (2) 3-5-001:064

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 Engineering Division on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at (808) 587-0417. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosure
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

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

2017 SEP 18 PM 01:33 ENGINEERING

RECEIVED
LAND DIVISION
2017 SEP 19 PM 4:12
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 18, 2017

MEMORANDUM

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
From: X Engineering Division
___Div. of Forestry & Wildlife
___Div. of State Parks
X Commission on Water Resource Management
___Office of Conservation & Coastal Lands
X Land Division – Maui District
X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator

SUBJECT: Draft Environmental Assessment and Anticipated FONSI for the Proposed **Wailuku Apartment Rental Housing Project**

LOCATION: Waiale Road, Wailuku, Island of Maui; TMK: (2) 3-5-001:064

APPLICANT: Bagoyo Development Consulting Group on behalf of Legacy Wailuku, LLC

Transmitted for your review and comment is information on the above-referenced subject matter. We would appreciate your comments by **October 20, 2017.**

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(✓) Comments are attached.

Signed: _____

Print Name: Carty S. Chang, Chief Engineer

Date: 9/19/17

cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/Russell Y. Tsuji

Ref: **Draft Environmental Assessment and Anticipated FONSI for the Proposed Wailuku Apartment Rental Housing Project, Waiale Road, Wailuku, Island of Maui; TMK: (2) 3-5-001:064**

COMMENTS

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a designated Flood Hazard.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zone designations can be found using the Flood Insurance Rate Map (FIRM), which can be accessed through the Flood Hazard Assessment Tool (FHAT) (http://gis.hawaiinfip.org/FHAT).

Be advised that 44CFR reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may take precedence over the NFIP standards as local designations prove to be more restrictive. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7253.
- Kauai: County of Kauai, Department of Public Works (808) 241-4846.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: 9/19/17

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Russell Y. Tsuji
Land Administrator
State of Hawaii
Department of Land and Natural Resources
Post Office Box 621
Honolulu, Hawaii 96809

Dear Mr. Tsuji:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 24, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a designated Flood Hazard.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zone designations can be found using the Flood Insurance Rate Map (FIRM), which can be accessed through the Flood Hazard Assessment Tool (FHAT) (http://gis.hawaiinfip.org/FHAT).

Be advised that 44CFR reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may take precedence over the NFIP standards as local designations provide to be more restrictive.

Response to comment:

According to the County of Maui Department of Planning the subject property is located in Zone X, an area of minimal flooding and outside of a Flood Hazard zone.

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Again, thank you for your comments. Your comments and this response letter will be included in the new EA to be prepared. If additional clarification is required, please contact me at (808) 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Alan Downer, Administrator
State of Hawai'i
Department of Land and Natural Resources
State Historic Preservation Division
601 Kamokila Blvd., Room 555
Kapolei, Hawai'i 96707

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Downer:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

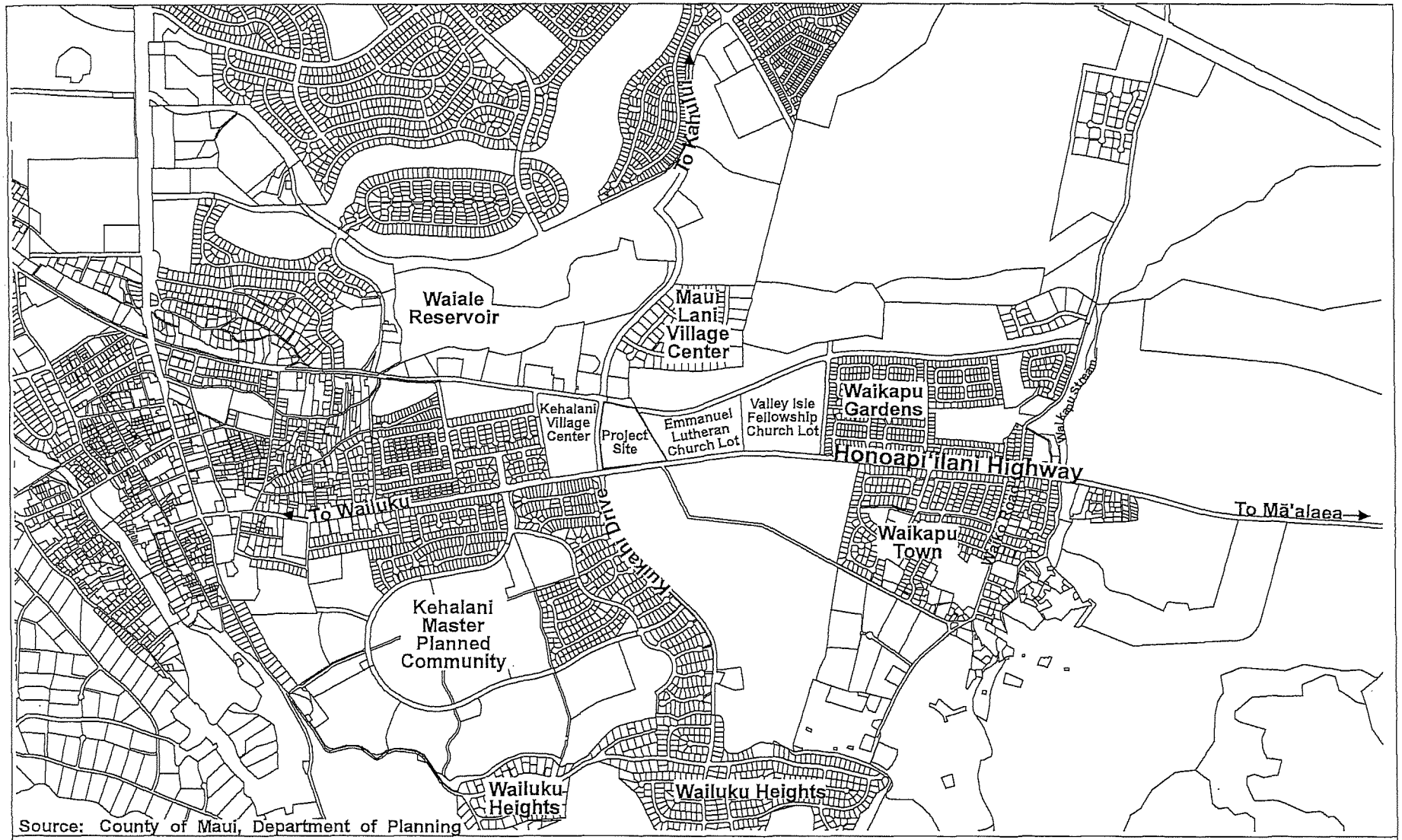


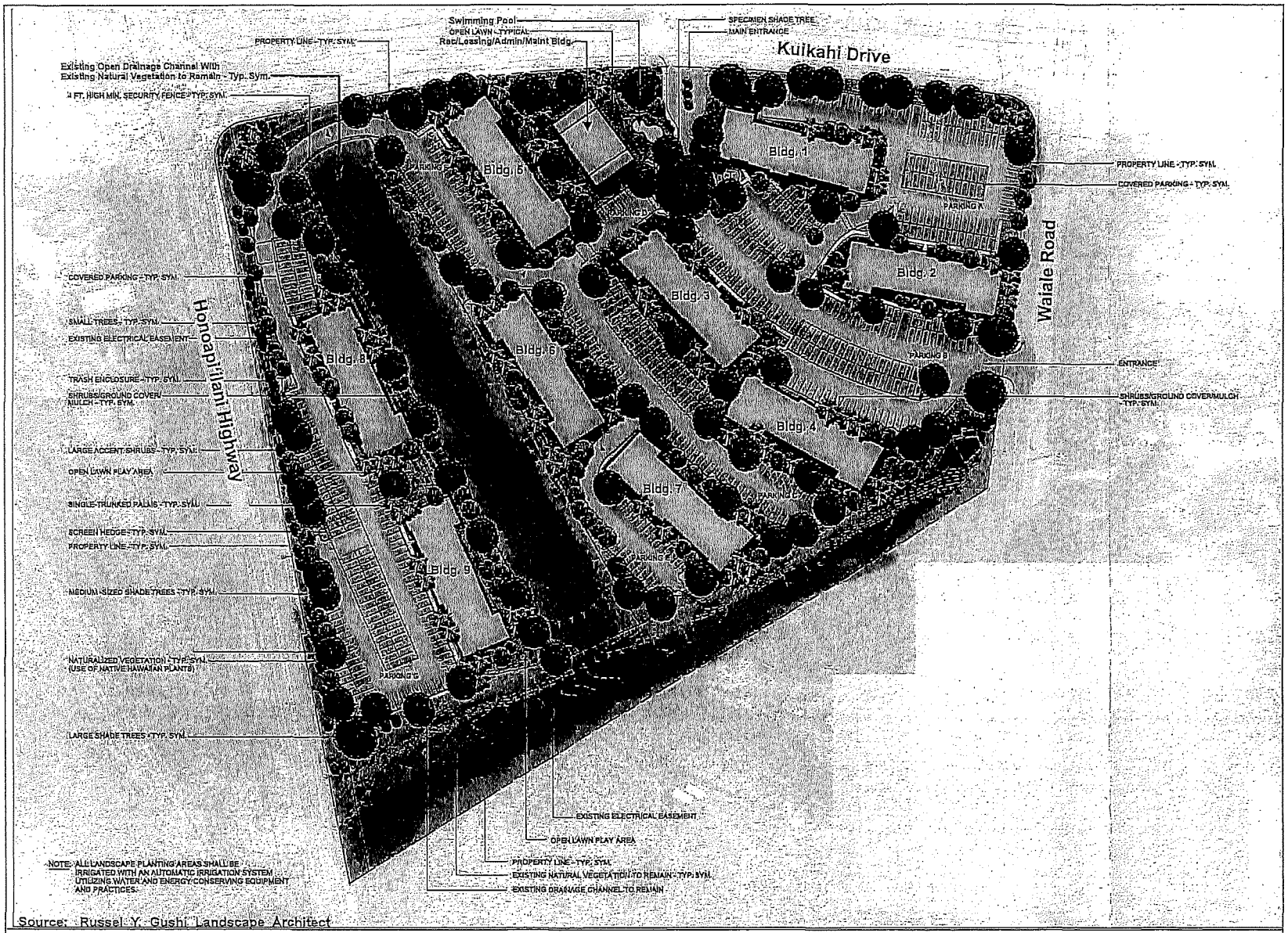
Figure 1

Wailuku Apartment Rental Housing Project
Regional Location Map

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi, Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DAVID Y. IGE
GOVERNOR OF
HAWAII

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

ROBERT K. MASUDA
FIRST DEPUTY

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

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

October 18, 2017

IN REPLY REFER TO:
Log No. 2017.02039
Doc No. 1710MBF07
Archaeology
History & Culture

Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Maui, Hawaii 96793
vbagoyo-devgroup@hawaii.rr.com

Dear Mr. Bagoyo,

SUBJECT: **Chapter 6E-42 Historic Preservation Review –**
Archaeological Assessment Report for a 15.0 Acre Parcel Located Along Waiale Road
Wailuku Ahupua'a, Wailuku District, Island of Maui
TMK: (2) 3-5-001:064

Thank you for the opportunity to review the subject submittal titled, *Draft Archaeological Assessment Report for a 15.0 Acre Parcel Located Along Waiale Road in Wailuku Ahupua'a and District Pū'Ali Komohana Moku Island of Maui; TMK: [2] 3-5-001:064* (O'Claray-Nu et al., May 2017). The draft archaeological inventory survey (AIS) reported as an archaeological assessment (AA) was received by the State Historic Preservation Division (SHPD) as part of a draft environmental assessment (EA) on September 15, 2017. An associated archaeological monitoring plan (AMP) was submitted concurrently in advance of SHPD review of the subject project. This submittal for historic preservation review does not follow Hawaii Administrative Rules (HAR) §13-284-3.

An AIS was conducted on a 15.0-acre parcel proposed for affordable residential development. Reportedly, the entire project area has been extensively altered, including a retention trench for drainage improvements on the western portion of the parcel; as well as, sugar cane cultivation and past sand mining activities, where no inland sand dunes are presently extant. A pedestrian survey was conducted over 100 percent of the project area and a total of 11 backhoe trenches were excavated across the parcel. All subsurface testing produced negative results. Evidenced by the random trenches, the subsurface in some areas of the project area is disturbed from 0.60 meters below surface (mbs) to 1.85 mbs. Bedrock was encountered from 1.6 mbs to 2.30 mbs.

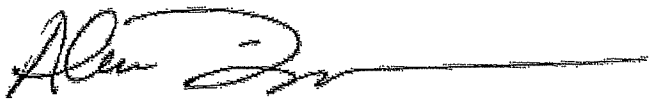
The project area is in a culturally-sensitive area. In proximity to the area there are: burial features, including Sites 50-50-04-2916, 50-50-04-5965, 50-50-04-5966, 50-50-04-5680, 50-50-04-6561 and 50-50-04-6573; Historic period sites included a road bed, Site 50-50-04-5963, a sugarcane flume, Site 50-50-04-5967, and Kama Ditch, Site 50-50-04-5474.

An effect determination is not presented in the subject documentation or the associated EA. However, based on available information, SHPD's determination is no historic properties affected pursuant to HAR §13-284-7; no historic properties have been identified within the project area. The SHPD does not concur with the recommendation of no further archaeological work. Due to the inherent imprecision of random mechanical trenching over large culturally-sensitive areas, there is a high probability of encountering cultural resources during the proposed large-scale earthmoving activities associated with the subject project. **Therefore, SHPD recommends** archaeological monitoring for identification purposes.

In the future, please include the agency point of contact (POC) on all correspondence with the SHPD, and **do not submit unsolicited historic preservation review materials to the SHPD, including monitoring plans, they will not be reviewed.**

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

Aloha,



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

cc: County of Maui Planning
Planning@co.maui.hi.us

Jeff Pantaleo, Principal Investigator
Archaeological Services Hawaii (ASH)
jpanta4149@aol.com

County of Maui Cultural Resources Commission
Annalise.Kehler@co.maui.hi.us

County of Maui Public Works
public.works@mauicounty.gov

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

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer
Kakuhihewa Building
601 Kamokila Blvd., Suite 555
Kapolei, Hawaii 96707

Dear Mr. Downer:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. although we are acknowledging your comments regarding the draft EA and Archaeological Assessment, please be ad vised that the DEA which you reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We also acknowledge that a monitoring plan will be required for the proposed project.

Again, thank you for your comments. A copy of your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at (808) 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

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If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Jade Butay, Interim Director
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, Hawai'i 96813

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Butay:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

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On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

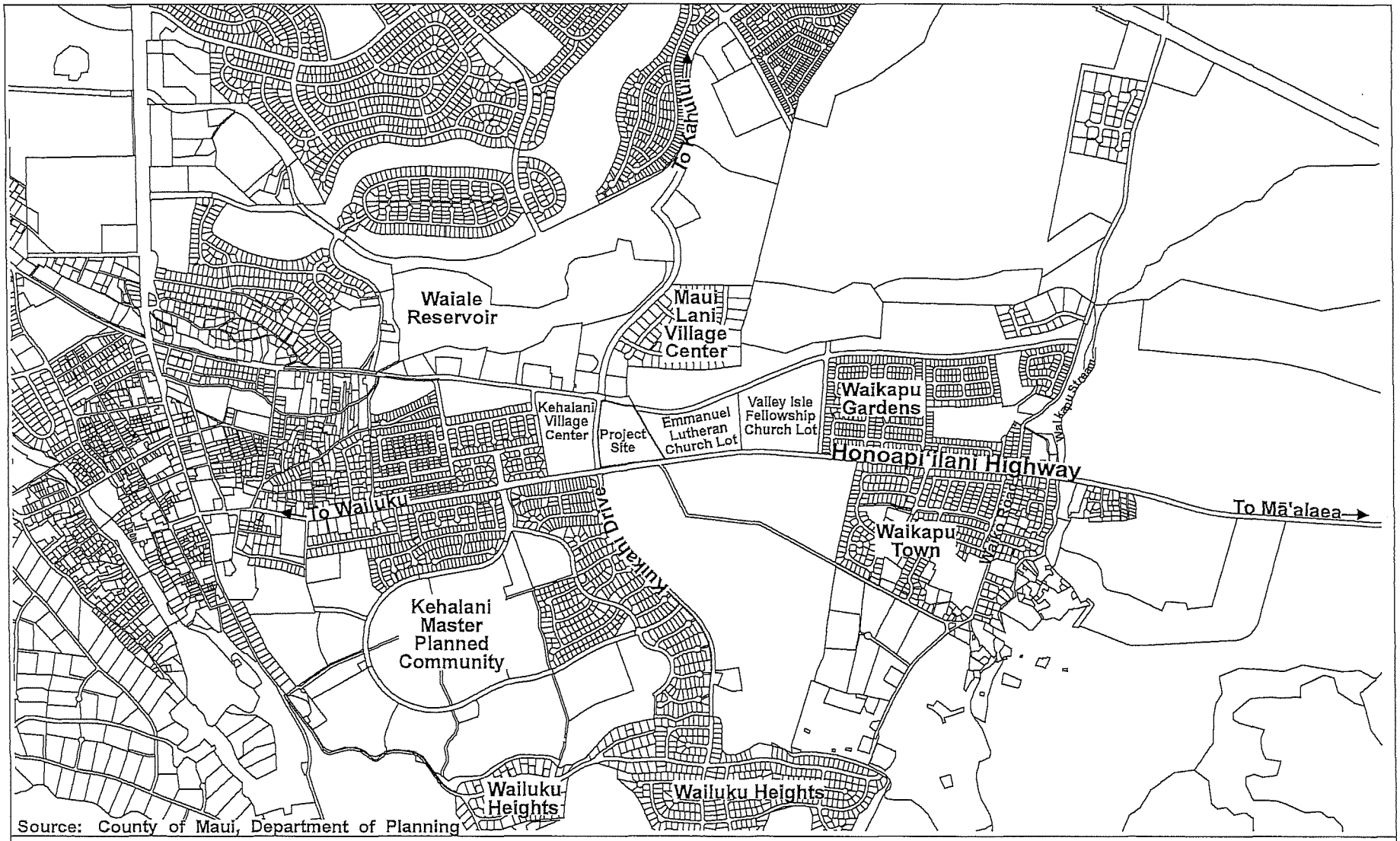
Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc



Source: County of Maui, Department of Planning

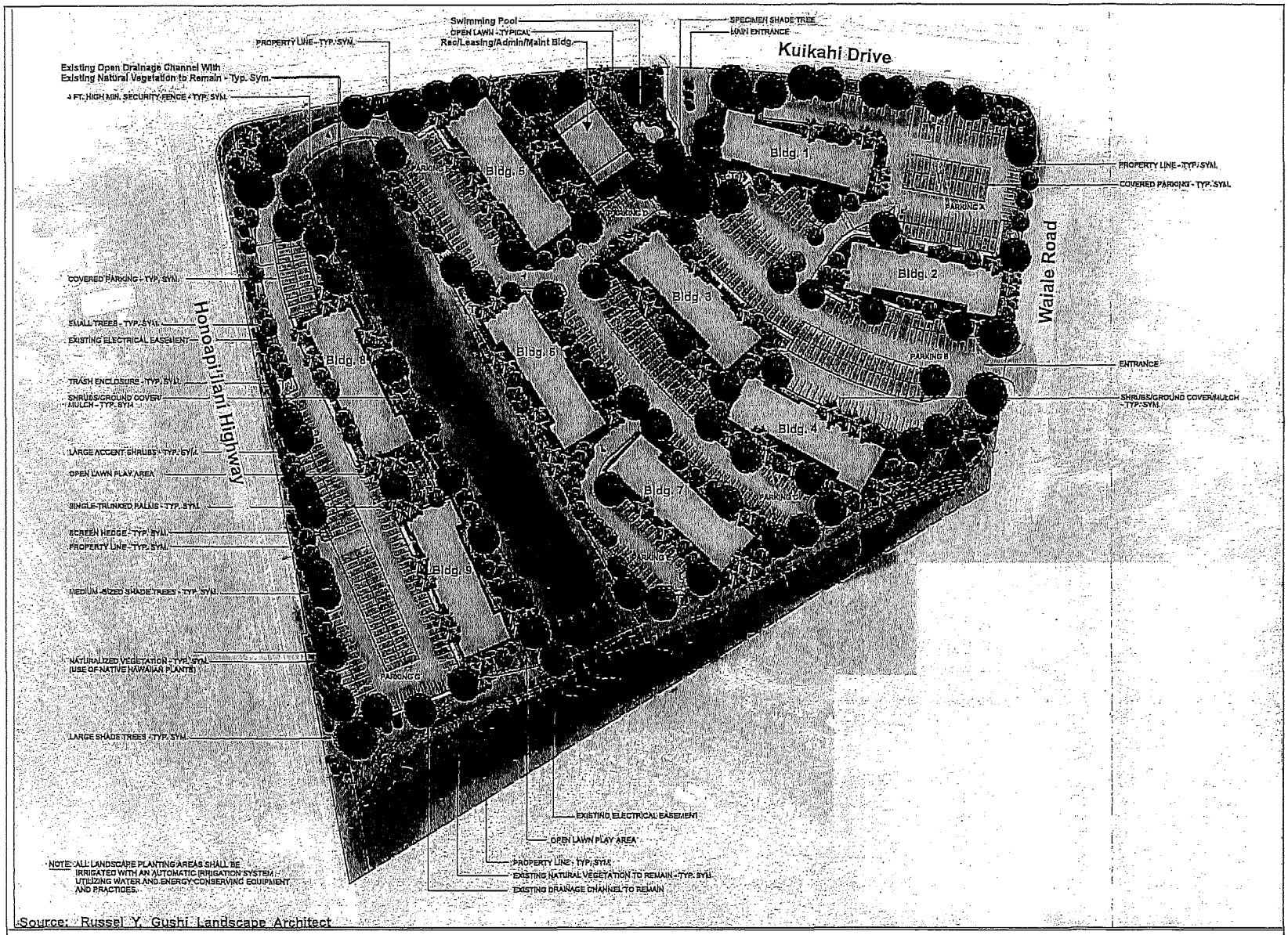
Figure 1

Wailuku Apartment Rental Housing Project
Regional Location Map

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DAVID Y. IGE
GOVERNOR

FORD N. FUCHIGAMI
DIRECTOR

Deputy Director
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

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

IN REPLY REFER TO:
HWY-PS 2.5967

October 20, 2017

Mr. Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

Subject: Draft Application for 201(H) Affordable Housing Development and
Draft Environmental Assessment
Wailuku Apartment Workforce Housing Project, Wailuku, Maui
TMK: (2) 3-5-001:064

Thank you for consulting with us regarding the Draft Application and the Draft Environmental Assessment (EA) for a Workforce Housing Development pursuant to Section 201H-38, Hawaii Revised Statutes on the subject project. The Hawaii Department of Transportation understands that the Applicant is not requesting a review for any exemption to the transportation requirements based on the information provided.

The proposed development totaling 324 units will consist of 195 workforce rental units and 129 as market rate rental units within the 14.4 acres site. The development is bounded by Honoapiilani Highway on the north, Kuikahi Drive on the east, Waiale Drive on the south, and the Waiale Irrigation Reservoir owned by A & B Properties west of the site. Vehicular accesses will be on both Waiale Road and on Kuikahi Drive.

Based on the information provided, the proposed project does not appear to significantly impact the State highway system. Therefore, we do not have any objections or comments on the Draft EA.

If you have any questions, please contact Ken Tatsuguchi, Engineering Program Manager, Highways Division, Planning Branch, at (808) 587-1830. Please reference file review number PS 2017-125.

Sincerely,

FORD N. FUCHIGAMI
Director of Transportation

c: Office of Environmental Quality Control
Mr. Ken Takahashi – Hawaii Housing Finance & Development Corporation

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

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

Dear Mr. Butay:

We sincerely thank you for your department's review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to acknowledge the receipt of your department's letter, dated October 20, 2017, please be advised that the DEA which your department reviewed will be withdrawn and a new EA prepared by another consultant. We also acknowledge that your department does not have any objections to the proposed project.

Again, thank you for your department's comments. Your department's comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at (808) 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Vern T. Miyagi, Administrator
State of Hawai'i
Hawai'i Emergency Management
Office of Director of Emergency Management
Civil Defense
3949 Diamond Head Road
Honolulu, Hawai'i 96816

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Miyagi:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

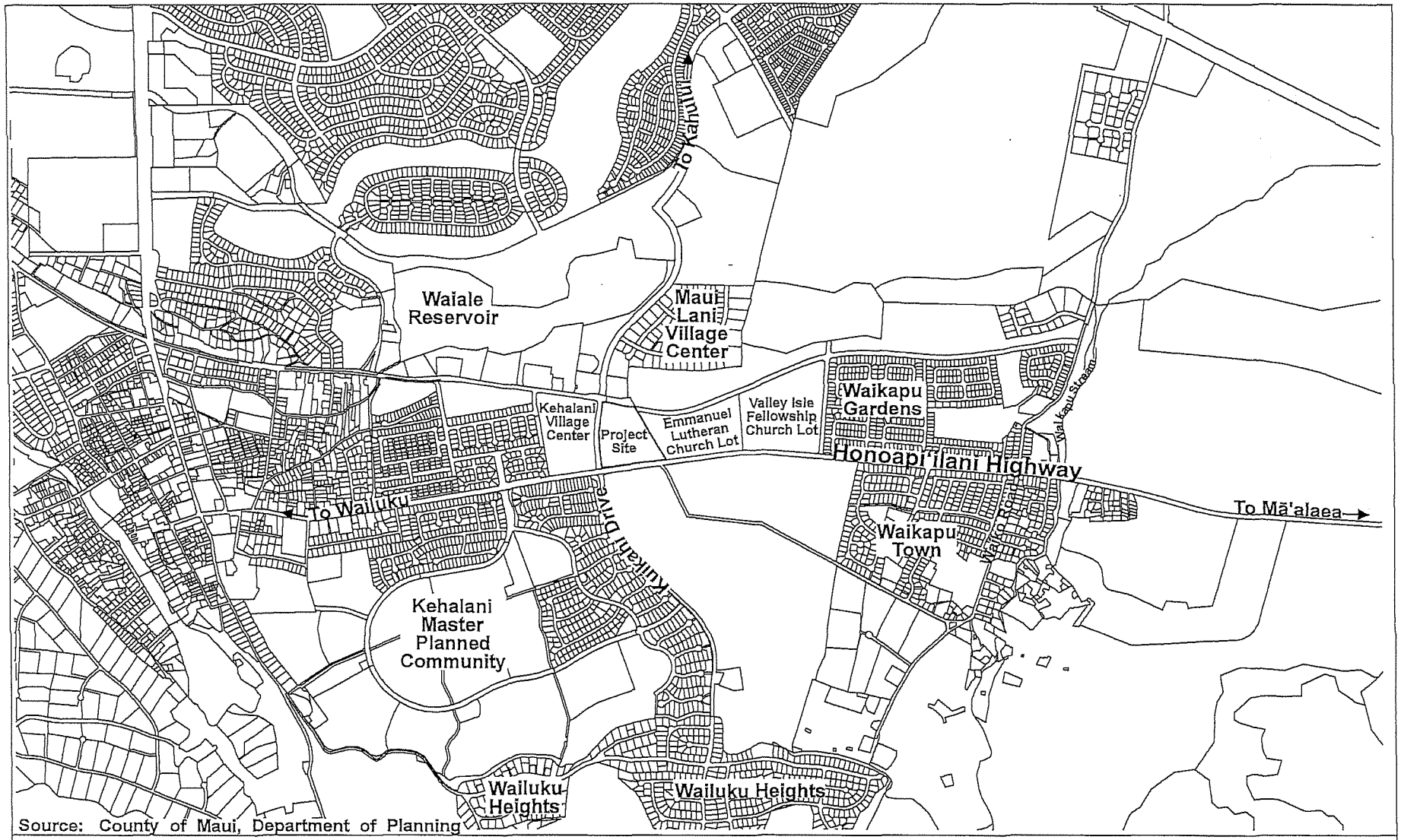


Figure 1

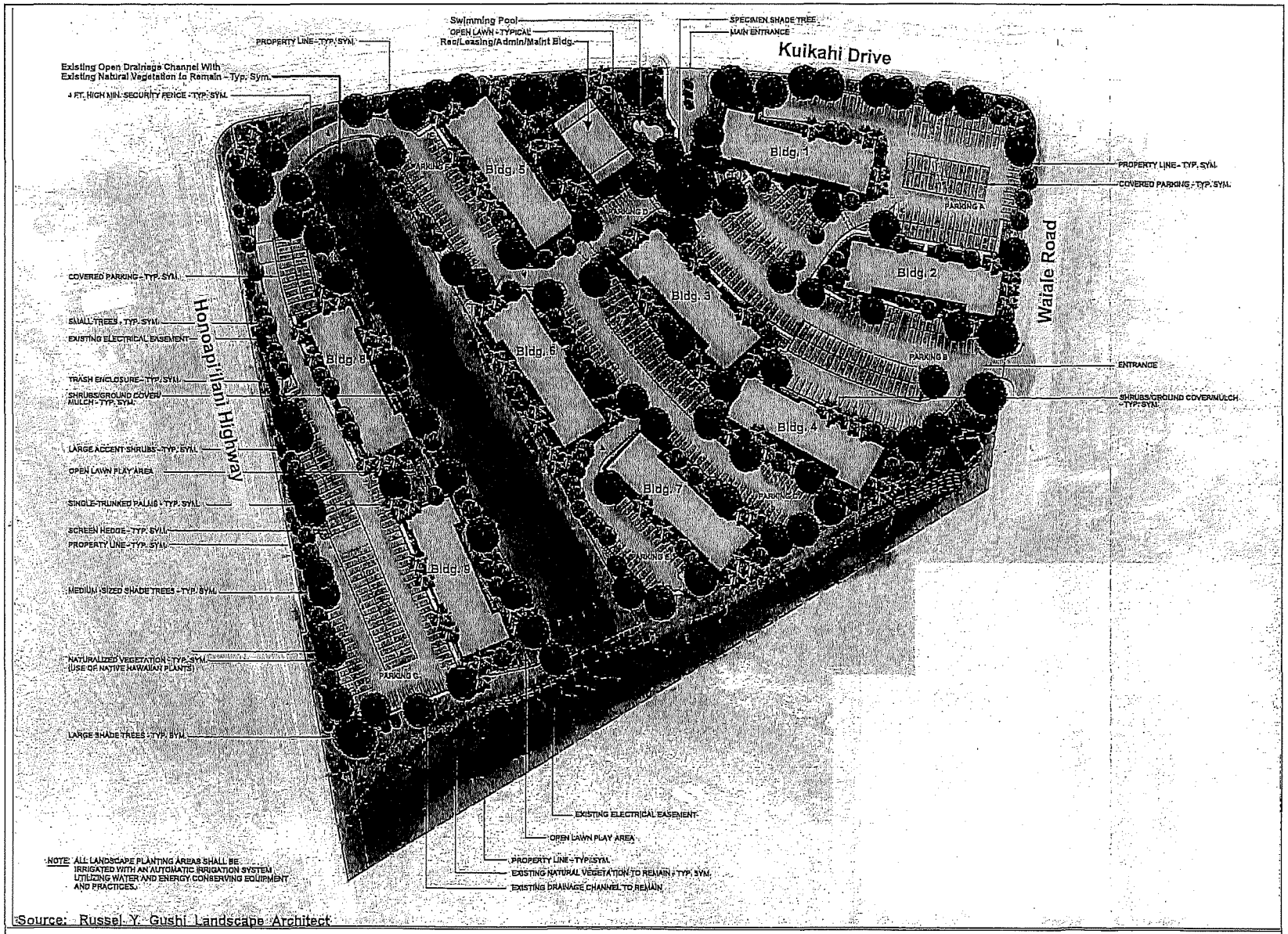
Wailuku Apartment Rental Housing Project

Regional Location Map

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DAVID Y. IGE
GOVERNOR

MAJOR GENERAL ARTHUR J. LOGAN
DIRECTOR OF EMERGENCY MANAGEMENT

VERN T. MIYAGI
ADMINISTRATOR OF EMERGENCY MANAGEMENT

PHONE (808) 733-4300
FAX (808) 733-4287

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF EMERGENCY MANAGEMENT / CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

September 21, 2017

Mr. Vince Bagoyo
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

Proposed Wailuku Apartment Rental Housing Project
TMK No. (2) 3-5-001:064 Waiale Road, Wailuku, Maui, Hawaii

Thank you for the opportunity to comment on this proposed development.

The proposed rental housing development will increase the residential population in an area with limited safe room options. Therefore, 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/or seismic events.

We also note that our siren relocation and upgrade project will ensure siren coverage of the proposed development location.

If you have any questions, please call Havinne Okamura, Hazard Mitigation Planner, at (808)733-4300, extension 556.

Sincerely,

VERN T. MIYAGI
Administrator of Hawaii Emergency Management

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

January 24, 2018

Vern T. Miyagi
Administrator – Hawaii Emergency Management
Hawaii Department of Defense
Office of the Director of Emergency Management Civil Defense
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495

Dear Mr. Miyagi:

We sincerely thank you for your review of our Draft environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2)3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

As appropriate the Applicant will review your comments regarding incorporation of hardening measures to withstand high-wind and/or seismic events.

Again, thank you for your comments. Your letter and this response letter will be included in the new EA to be prepared. If additional clarification is required, please contact me at (808) 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Dr. Kamana'opono Crabbe, Chief Executive Officer
Office of Hawaiian Affairs
560 N. Nimitz Highway, Suite 200
Honolulu, Hawai'i 96817

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Dr. Crabbe:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

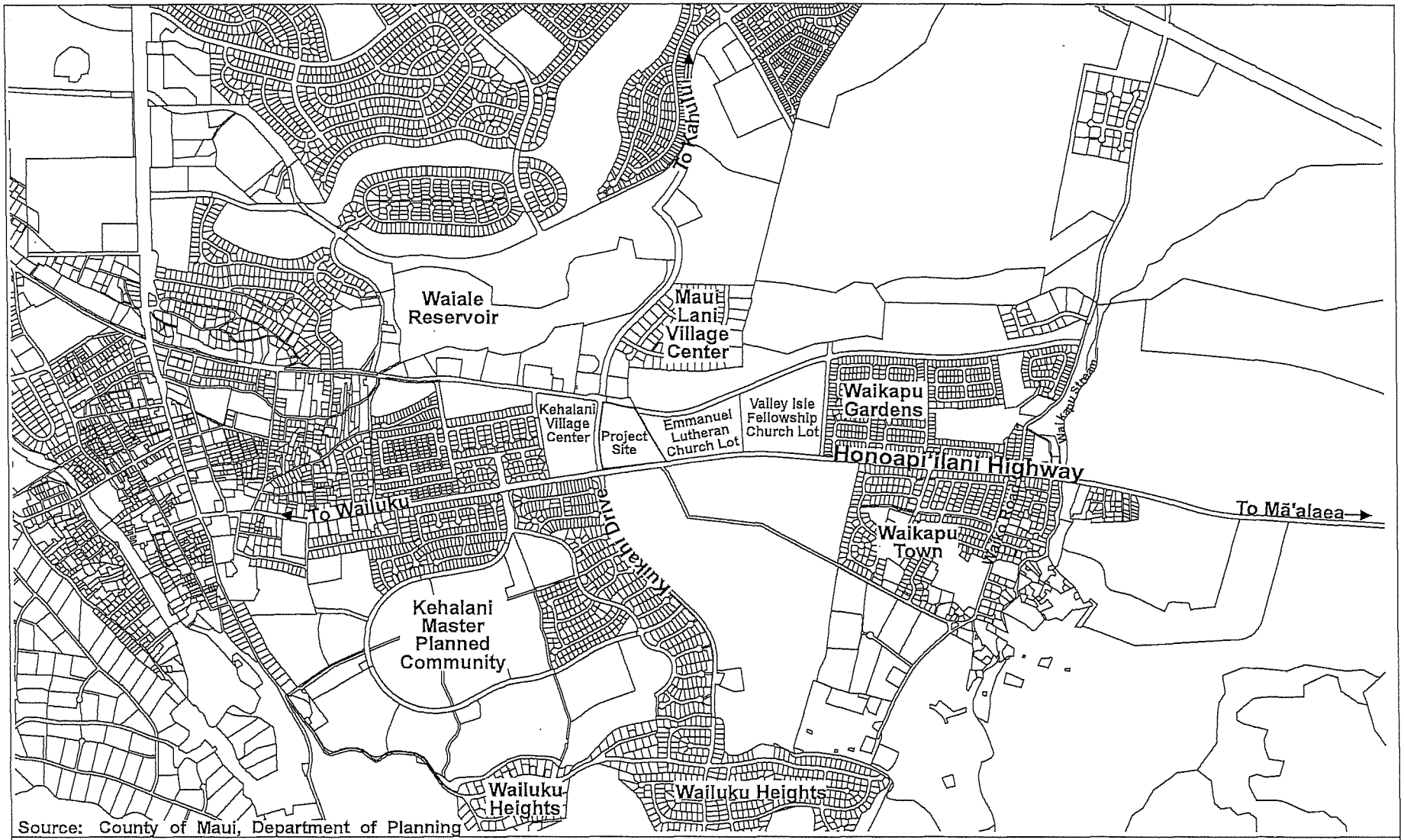


Figure 1

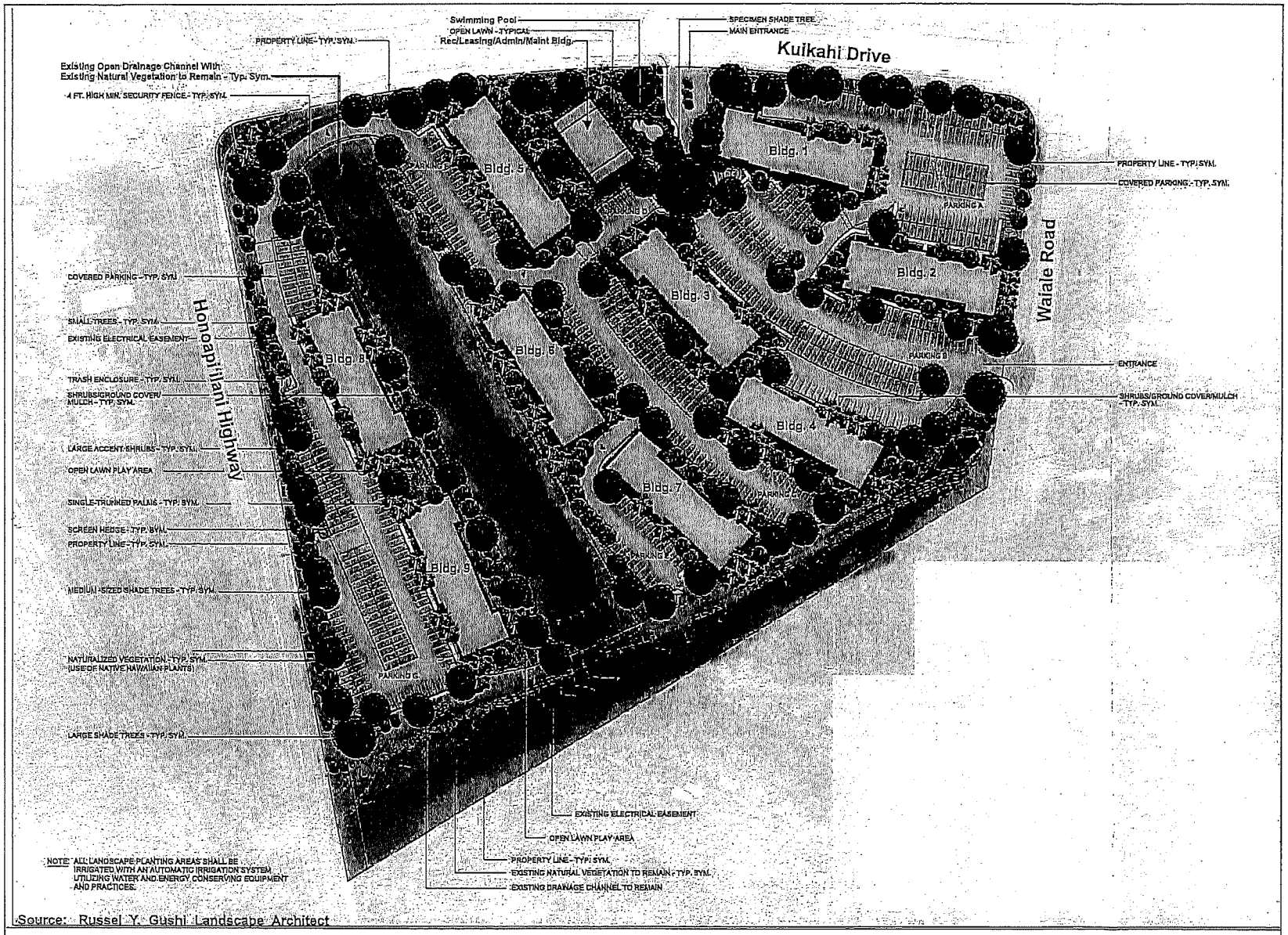
Wailuku Apartment Rental Housing Project
Regional Location Map

1,000 Feet
0 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

PHONE (808) 594-1888 FAX (808) 594-1938

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
560 N. NIMITZ HWY., SUITE 200
HONOLULU, HAWAI'I 96817

HRD17-8305B

October 25, 2017

Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, HI 96793

Re: Comments on Draft Environmental Assessment and Anticipated Finding of No Significant Impact for the Proposed Wailuku Apartment Rental Housing Project
Wailuku Ahupua'a, Pū'ali Komohana Moku, Maui Mokupuni
Tax Map Key: (2) 3-5-001: 064

Aloha e Mr. Bagoyo:

The Office of Hawaiian Affairs (OHA) has received your letter and draft environmental assessment (DEA) for the proposed Wailuku Workforce Apartment Housing project. The applicant, Legacy Wailuku, LLC, is proposing to develop 324 rental units on 14.4 acres. The applicant is proposing to process the approvals for the proposed development under Hawai'i Revised Statutes (HRS) § 201H-38, which provides eligible housing developments exemptions from statutes, ordinances, charter provisions, and rules related planning, zoning construction standards for subdivisions, and development and improvement of land. This DEA also serves as the HRS § 201H-38 application agency/public comment document.

The proposed project will consist of 195 (60%) affordable apartment units to qualified individuals earning within 80% and 140% of Maui area median income (AMI) as set forth by the Hawai'i Housing Finance and Development Corporation (HHFDC) Affordable Rent Guidelines. The remaining 129 units (40%) will be unrestricted and priced at market. The applicant is proposing to construct twenty-seven studio units, 108 1-bedroom units, 135 2-bedroom units, and fifty-four 3-bedroom units. Units will range in size from 400 square feet to 950 square feet. The proposed project will have a minimum of 486 parking stalls, a recreation center, swimming pool, and four children play areas. According to the DEA, fifty-five units will be reserved for the 80% to 100% AMI level, fifty-five units will be reserved for the 101% to 120% AMI level, and eighty-five units will be reserved for the 81% to 140% AMI level.

Applicability of Hawai'i Revised Statutes § 201H-38

According to the DEA, the applicant is proposing to develop rental units in accordance with Hawai'i Revised Statutes (HRS) § 201H-38. HRS § 201H-38(a) states,

> [HHFDC] may develop on behalf of the State or with an eligible developer, or may assist under a government assistance program in the development of, housing projects that shall be exempt from all statutes, ordinances, charter provisions, and rules of any government agency related to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon . . . .

Pursuant to HRS § 201H-38(b), a government assistance program is defined as "a housing program qualified by the corporation and administered or operated by the corporation or the United States or any of their political subdivisions, agencies, or instrumentalities, corporate or otherwise.

OHA is concerned that the exemptions under HRS § 201H-38(b) may not apply to the proposed project. The DEA states that the applicant, in coordination with HHFDC will seek exemptions as provide by HRS § 201H-38 and that these exemptions will be processed through HHFDC. Please clarify the applicability of HRS § 201H-38 to the proposed project. Please provide additional information as to how the applicant is an "eligible developer" or a "government assistance program" in accordance with HRS § 201H-38.

Incomplete HRS § 201H-38 Application

The DEA, which also serves as the HRS § 201H-38 application, is missing critical information required for the HRS § 201H-38 application.[1] The DEA is missing information such as the number of years the project will commit to maintaining the project as affordable; an acknowledgement that the affordable units will be subject to HHFDC buyback and shared appreciation; an indication of the number of units allotted for family, elderly, homeless, and tenants with special housing needs; and an indication of whether tenants will be charged a fee for parking in addition to rent. Please include this and any information required for the HRS § 201H-38 application. OHA is also requesting information regarding the number of studio, 1-bedroom, 2-bedroom, and 3-bedroom units that will be allotted for each AMI level.

Affordable Housing

Maui's affordable housing crisis requires land use planning that prioritizes and maximizes affordable housing opportunities for local residents.[2]

---

[1] See HHFDC 201H Application, *available at* http://dbedt.hawaii.gov/hhfdc/201h-development-assistance/.

[2] The 2016 Hawai'i Housing Planning Study shows very limited demand for market-rate housing. Instead, the majority of demand for Native Hawaiians, the State, as well as Maui County, is almost entirely for units that are affordable. *See* SMS, HAWAI'I HOUSING PLANNING STUDY 34 (2016), *available at* https://dbedt.hawaii.gov/hhfdc/files/2017/03/State_HHPS2016_Report_031317_final.pdf.

Hawai'i families are in particular need of affordable housing units at or below low-moderate income levels. Notably, recent research shows that 91 percent of the rental housing demand in Maui is for rental units at or below 80% AMI. 80 percent of the rental housing demand is at 60% or below AMI. Only 8 percent of the Maui rental housing demand is for units that are at 80% AMI to 140% AMI, with only 3 percent of the demand at 120% AMI to 140% AMI. Less than 1 percent of the demand for rental units is for market rate housing, or housing at or above 140% AMI.[3] For Native Hawaiians, 80 percent of the housing demand for rental units on Maui at 80% AMI or below.[4] As such, OHA is concerned that the proposed project does not adequately address the need for affordable housing. As proposed, income levels of all of the units, while still deemed 'affordable', do not address the need of 91 percent of Maui residents.

The applicant is seeking numerous exemptions under HRS § 201H-38, which, if granted, would provide the applicant with an estimated savings of $5,116,053, or $26,236 per unit. OHA seeks to ensure that the proposed project will truly meet the affordable housing needs of our Native Hawaiian beneficiaries, as well as families in Maui, before the exemptions are granted. According to the DEA, members of the Faith Action Community Equity (FACE) Maui – Affordable Housing Coalition raised concerns during a meeting on June 6, 2017, and suggested that the project should consider rents meeting 50% AMI or below. OHA is recommending that the developer consider funding alternatives (e.g. government grants or subsidies) that would allow the project to meet the needs of the community and offer rental units to families/individuals below 80% AMI.

Alternatives to the Proposed Action

The proposed action alternatives section proposes three alternatives: the preferred alternative, an agriculture subdivision, and no action. OHA suggests considering and including in this section the concerns raised by FACE and discussing the alternative of providing rental units to those at or below 80% AMI.

Further, under the "Agriculture Subdivision" section, it states, "The Applicant strongly believes that its proposed 324 workforce apartment rental unit that is reasonably-priced for families earning 80% to 140% of Maui's median income per HHFDC's affordable rent guidelines will help meet the housing shortage on Maui." Please reflect this statement to accurately reflect the proposed project, which proposes 195 units for families earning 80% to 140% AMI.

Impacts to Cultural Resources

OHA is concerned that your Anticipated Finding of No Significant Impact is premature given that significant impacts to cultural resources, if any, have not yet been identified. Contrary to the statement in the DEA that the cultural impact assessment (CIA) contains "communication with organizations and individuals having knowledge of the project area, its cultural resources,

[3] *Id.* at 34.
[4] *Id.* at 72.

and its practices and beliefs," consultation for the CIA is ongoing, according to the CIA included with the DEA. In fact, OHA received a request for information for the CIA only one day prior to receiving the DEA. Please provide the draft CIA to OHA for review once consultation with knowledgeable individuals has been completed.

OHA is also concerned that the archaeological inventory survey (AIS) conducted of the project parcel did not adequately attempt to identify subsurface cultural resources and/or iwi kūpuna (human remains/burials) in the project area. The AIS report states that the subject parcel is "located along the culturally sensitive Wailae Road/Lower Main Corridor which is known to contain numerous traditional burials and extensive habitation sites." The report also states that the eastern portion of the project parcel is known to contain Pu'uone Sand that is likely overlying Iago silty clay soils. OHA notes that it is common knowledge that there is a high likelihood of encountering iwi kūpuna when doing ground disturbing activities in and around sand deposits and dunes. The AIS report identifies several instances where iwi kūpuna were disturbed in the vicinity of the project area.

According to the AIS report eleven test trenches were excavated in the 14.4-acre project area. The report indicates that the project parcel has undergone extensive disturbances from grubbing and grading for sugar cane cultivation, sand mining, and recent construction activities. OHA requests a map identifying the test trenches in relation to the areas of the project parcel that have undergone disturbance and a map identifying the location of the test trenches in relation to the soil types in the project parcel. We also request information regarding the depth of the prior sand mining. Given that a portion of the project area is believed to be underlain by sandy soils and that the project area is located in a close proximity to identified iwi kūpuna, OHA is concerned that the eleven test trenches were insufficient to identify the presence or absence of subsurface cultural resources and/or iwi kūpuna. OHA recommends conducting additional test trenches to identify the extent of the previous land disturbance and to identify the areas of the project parcel that is underlain by sandy soils.

Thank you for providing the opportunity to comment. We look forward to continuing consultation. Should you have any questions, please contact Teresa Kaneakua, OHA Lead Compliance Specialist, at (808) 594-0231 or teresak@oha.org.

'O wau iho nō me ka 'oia 'i'o,

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer

KC:tk

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Kamana'opono M. Crabbe, Ph.D.
Chief Executive Officer
Office of Hawaiian Affairs
560 N. Nimitz Hwy., Suite 200
Honolulu, HI 96817

Dear Dr. Crabbe:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. We are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA

We sincerely hope this provides a thorough response to your letter dated October 25, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

OHA is concerned that the exemptions under HRS § 201H-38(b) may not apply to the proposed project. The DEA states that the applicant in coordination with HHFDC will seek exemptions as provide by HRS § 201H-38(b) and that these exemptions will be processed through HHFDC. Please clarify the applicability of HRS § 201H-38(b) to the proposed project. Please provide additional information as to how the applicant is an "eligible developer" or a "government assistance program" in accordance with HRS § 201H-38(b).

Response to comment:

The Applicant has reviewed HRS §201H-38(b) and find that the correct citation requesting the exemptions should have been HRS §201H-38(a). This correction will be addressed in the new EA.

Comment:

The DEA, which also serves as the HRS § 201H-38 application, is missing critical information required for the HRS § 201H-38 application. The DEA is missing information such as the number of years the project will commit to maintaining the project as affordable; an acknowledgement that the affordable units will be subject to HHFDC buyback and shared appreciation; an indication of the number of units allotted for family, elderly, homeless, and tenants with special housing needs; and an indication of whether tenants will be charged a fee for parking in addition to rent. Please include this

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(808)357-3842
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and any information regarding the number of studio, 1-bedroom, 2-bedroom, and 3-bedroom units that will be allotted for each AMI level.

Response to comment:

The DEA has been prepared to comply with Chapter 343, HRS and was included in the documentation for the 201-H application filed with the Hawaii Housing Finance and Development Corporation (HHFDC). The Applicant will comply with the requirements of HHFDC regarding maintaining the affordability of the project.

Comment:

Hawai'i families are in particular need of affordable housing units at or below low-moderate income levels. Notably, recent research shows that 91 percent of the rental housing demand in Maui is for rental units at or below 80% AMI. 80 percent of the rental housing demand is at 60% or below AMI. Only 8 percent of the Maui rental housing demand is for units that are 80% AMI to 140% AMI, with only 3 percent of the demand at 120% AMI to 140% AMI. Less than 1 percent of the demand for rental units is for market rate housing, or housing at or above 140% AMI. For native Hawaiians, 80 percent of the housing demand for rental units on Maui at 80% AMI or below. As such, OHA is concerned that the proposed project does not adequately address the need for affordable housing. As proposed, income levels of all the units, while still deemed 'affordable', do not address the need of 91 percent of Maui residents.

The applicant is seeking numerous exemptions under HRS § 201H-38, which if granted would provide the applicant with an estimated savings of $5,116,053, or $26,236 per unit. OHA seeks to ensure that the proposed project will truly meet the affordable housing needs of our Native Hawaiian beneficiaries, as well as families in Maui, before the exemptions are granted. According to the DEA, members of the Faith Action Community Equity (FACE) Maui – Affordable Housing Coalition raised concerns during a meeting on June 6, 2017, and suggested that the project should consider rents meeting 50% AMI or below. OHA is recommending that the developer consider funding alternatives (e.g. government grants or subsidies) that would allow the project to meet the needs of the community and offer rental units to families/individuals below 80% AMI.

Response to comment:

The Wailuku Apartment Rental Housing project is intended to provide a range of rental units in accordance with the income and rental requirements of HHFDC and the County of Maui. The Applicant believes that housing demand reaches across various income categories which can be addressed by the proposed action.

Although the project is not geared exclusively to Native Hawaiians we acknowledge that members of the Native Hawaiian community may be potential renters within this project and that their need is for rents at 80 percent of the area medium income (AMI) for Maui. The Applicant will review the project to address your concerns and whether more rentals in the lower range (80 percent or below AMI) can be accommodated, while maintaining the feasibility of the project.

Comment:

The proposed action alternatives section proposes three alternatives: the preferred alternative, an agricultural subdivision, and no action. OHA suggests considering and including in this section that concerns raised by FACE and discussing the alternative of providing rental units to those at or below 80% AMI.

Response to comment:

The new EA shall expand on the Alternatives. Consideration will be given to your suggestion that this section include concerns raised by FACE and an alternative discussing providing rental units to those at or below 80 percent of the AMI for Maui island.

Comment:

Further, under the "Agriculture Subdivision" section, it states, "The Applicant strongly believes that its proposed 324 workforce apartment rental unit that is reasonably-priced for families earning 80% to 140% of Maui's median income per HHFDC's affordable rent guidelines will help meet the housing shortage on Maui." Please reflect this statement to accurately reflect the proposed project, which proposes 195 units for families earning 80% to 140% AMI.

Response to comment:

Your comment will be addressed in the new EA.

Comment:

OHA is concerned that your Anticipated Findings of No Significant Impact is premature given that significant impacts to cultural resources, if any, have not yet been identified. Contrary to the statement in the DEA that the cultural impact assessment (CIA) contains "communication with organizations and individuals having knowledge of the project area, its cultural resources, and its practices and beliefs," consultation for the CIA is ongoing, according to the CIA included with the DEA. In fact, OHA received a request for information for the CIA only one day prior to the receiving the DEA. Please provide the draft CIA to OHA for revise once consultation with knowledge individuals have been completed.

Response to comment:

The new EA will include the completed Cultural Impact Assessment (CIA) for your office's review.

Comment:

OHA is also concerned that the archaeological inventory survey (AIS) conducted of the project parcel did not adequately attempt to identify subsurface cultural resources and/or iwi kupuna (human remains/burials) in the project area. The AIS report states that the subject parcel is "located along the culturally sensitive Waiale Road/Lower Main Corridor which is known to contain numerous traditional burials and extensive habitation sites." The report also states that the eastern portion of the project parcel is known to contain Pu'uone Sand that is likely overlying Iago silty clay soils. OHA notes that it is common knowledge that there is a high likelihood of encountering iwi kupuna when doing ground disturbing activities in and around sand deposits and dunes. The AIS report identifies several instances where iwi kupuna were disturbed in the vicinity of the project area.

According to the AIS repot eleven test trenches were excavated in the 14.4-acre project area. The report indicates that the project parcel has undergone extensive disturbances from grubbing and grading for sugar cane cultivation, sand mining, and recent construction activities. OHA request a map identifying the test trenches in relation to the areas of the project parcel that have undergone disturbance and a map identifying the location of the test trenches in relation to the soil types in the project parcel. We also request information regarding the depth of the prior sand minding. Given that a portion of the project area is believed to be underlain by sandy soils and that the project area is located in a close proximity to identified iwi kupuna, OHA is concerned that the eleven test trenches were insufficient to identify the presence of absence of subsurface cultural resources and/or iwi kupuna. OHA recommends conducting additional tests trenches to identify the extent of the previous land disturbance and to identify the areas of the project parcel that is underlain by sandy soils.

Response to comment:

The State Historic Preservation Division (SHPD) has reviewed the Archaeological Inventory Survey (AIS) and determined that "no historic properties affected by Hawaii Administrative Rules (HAR) §13-284-7; no historic properties have been identified within the project area." See **Attachment "A"**. SHPD recommended archaeological monitoring of the project.

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DEVELOPMENT
CONSULTING GROUP

Again, thank you for your comments. Your comments and this response shall be included in the new EA to be prepared. If additional clarification is required, please contact me at (808) 357-3842.
Sincerely,

V. Bagoyo Development Consulting Group, LLC

Enclosure

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VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Leo R. Asuncion, Jr., AICP, Director
State of Hawai'i
Office of Planning
P. O. Box 2359
Honolulu, Hawai'i 96804

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Asuncion:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 • Honolulu, Hawaii 96813 • Tel: 808.983.1233
www.munekiyohiraga.com

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

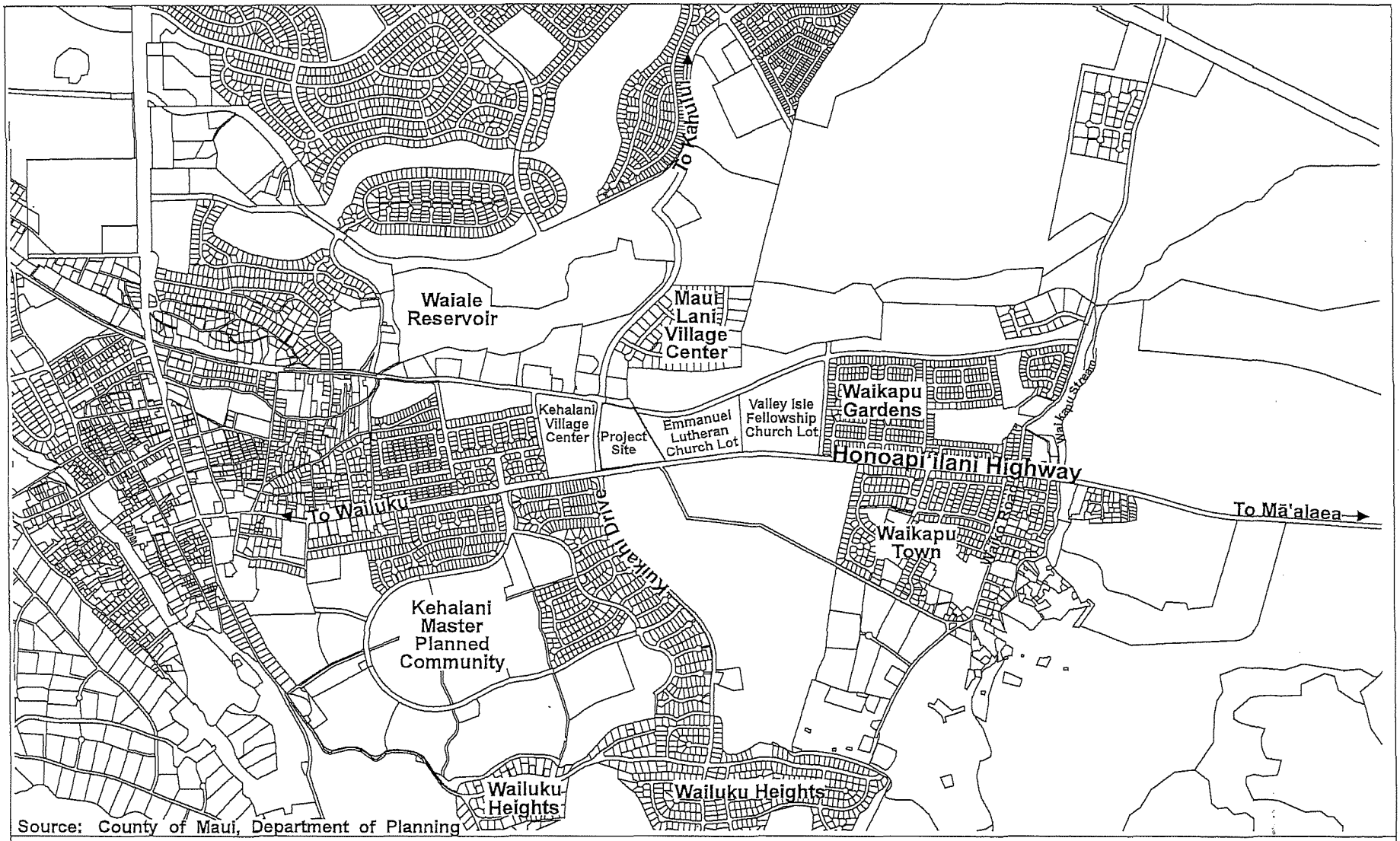
Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc



Source: County of Maui, Department of Planning

Figure 1

Wailuku Apartment Rental Housing Project

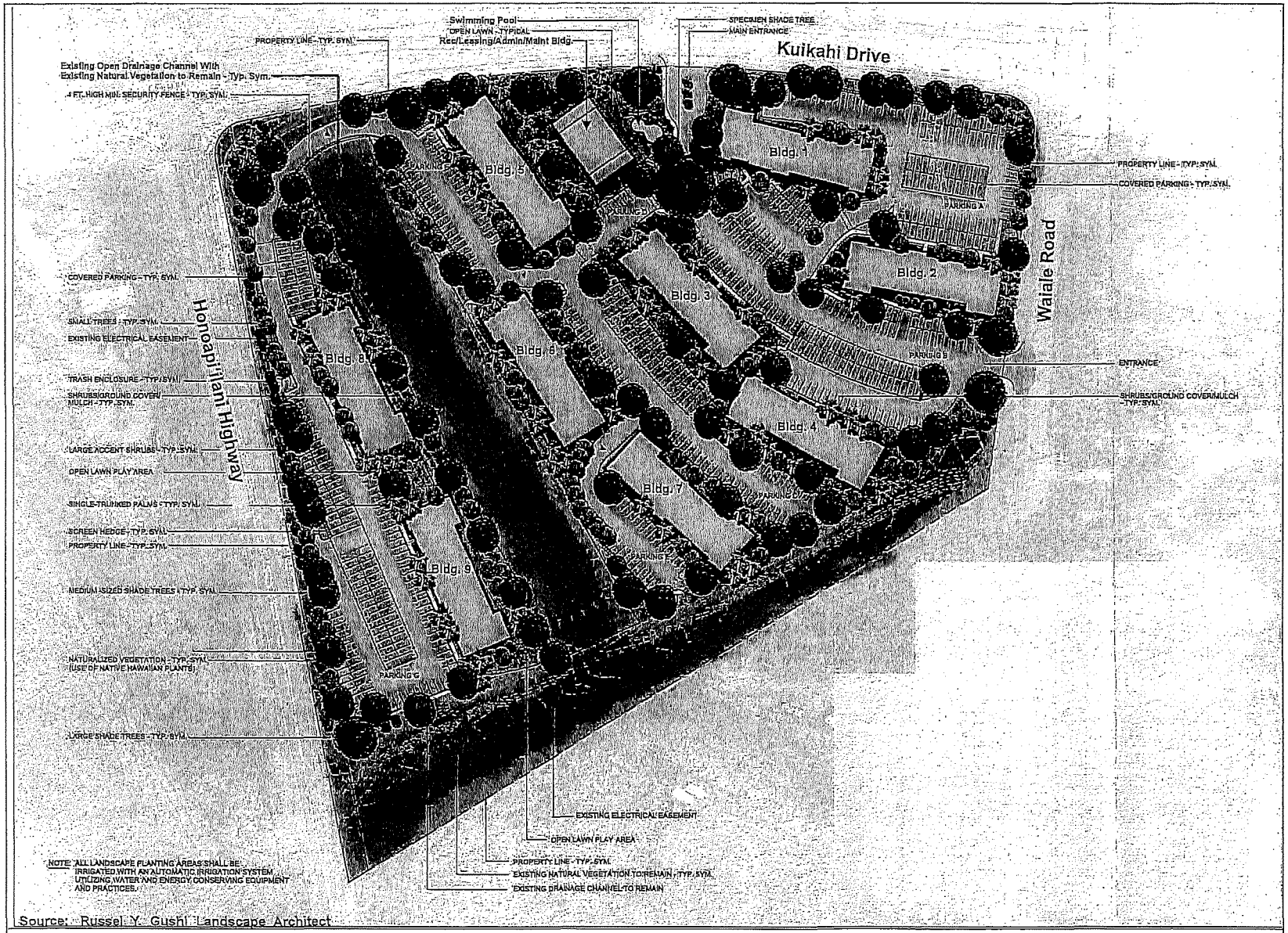
Regional Location Map

1,000 0 Feet 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

OFFICE OF PLANNING
STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

LEO R. ASUNCION
DIRECTOR
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
Web: http://planning.hawaii.gov/

DTS201710091704

October 10, 2017

Mr. Vince Bagoyo
Project Consultant
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

Subject: Draft Environmental Assessment and Anticipated Finding of No Significant Impact for the Proposed Wailuku Rental Housing Project, Waiale Road, Wailuku, Maui, Hawaii
TMK: (2) 3-5-001: 064

Thank you for the opportunity to provide comments for the Draft Environmental Assessment (Draft EA) on the proposed Wailuku Workforce Apartment housing project. The Draft EA review material was sent to our office by letter, dated September 14, 2017.

It is our understanding Legacy Wailuku, LLC proposes the development of a workforce housing complex that will consist of 324 rental apartment units. The distribution of apartment units in the housing project will consist of 195 affordable units and the remaining 129 units will be priced at market rates. The building complex will include resident amenities such as a recreation center with swimming pool and four children play areas. The rental rates for the proposed affordable units will be consistent with median income requirements pursuant to the Hawaii Housing Finance and Development Corporation (HHFDC) Affordable Rental Guidelines.

The Office of Planning (OP) has reviewed the transmitted material and has the following comments to offer:

1. OP acknowledges that the Draft EA provides a satisfactory analysis on the project's impact on water resources within or adjacent to the proposed project area.
    a. Impact to Surface Water Resources. Associated with Hawaii Revised Statutes (HRS) § 205A-2(4) Coastal Ecosystems; Section IV. A. 7, pages 23-24 of the Draft EA examines the impacts to streams and reservoir resources within the project area. Stormwater runoff is not expected to impact Waikapu Stream. Rather it will be directed to the Waiale Detention basin which has already been designed and constructed to accommodate the post-development runoff from the subject property. The Draft EA further states that this control method will fully mitigate this increase in the expected runoff due to the increase in hardened surfaces from the new building complex.

b. Drainage and Stormwater Runoff Control: Associated with HRS § 205A-2(1) Recreational Resources and (4) Coastal Ecosystems; Section IV. D. 2, pages 41-44 of the Draft EA examines drainage infrastructure. Additionally, Appendix D contains a Preliminary Engineering Report that details drainage and proposed stormwater mitigation strategies.

The drainage system that will serve the project site will be designed to accommodate the increased runoff generated by the proposed development. According to project's Preliminary Engineering Report, the project site will generally be graded so as to maintain the natural form of the site and maintain the drainage pattern that now exists. A storm drainage system consisting of drainage inlets and underground pipes will be installed throughout the development to collect the runoff and convey it to the northeast corner of the site where it will be discharged into the storm drain line on Kuikahi Drive.

2. The following items were not sufficiently addressed and will need further evaluation and discussion in the Final Environmental Assessment (Final EA).

a. The Hawaii State Planning Act, HRS Chapter 226. The analysis on the Hawaii State Planning Act found in Section V.C, pages 50-58 of the Draft EA was incomplete. OP acknowledges that the analysis includes a partial analysis of the statutes in HRS Chapter 226 that are applicable to this project.

This evaluation does not include a complete examination of the remaining objectives and policies of Part I – Overall Theme, Goals, Objectives, and Policies, nor does it examine, or Part III – Priority Guidelines.

This analysis should include discussion on the project's ability to meet all parts of HRS Chapter 226, examine the project's consistency with these statutes, or clarify where it is in conflict. If the applicant deems the remaining statutes in HRS Chapter 226 are not applicable to this project, the Final EA should affirmatively state such determination followed by discussion paragraphs.

b. Hawaii CZM Program: The analysis on the Hawaii CZM Program, HRS § 205A-2 is incomplete. Section V, page 65-70 of Draft EA includes a discussion on eight of the 10 objectives and policies. In its current form, the Draft EA does not fully address HRS § 205A-2. The Draft EA should include a complete examination of all 10 objectives and policies of HRS § 205A-2.

If there is a conflict with any portion of HRS § 205A-2, the Final EA should include what steps will be taken by the applicant to be compliant. If the applicant determines

that the two remaining statutes are not applicable to the project, the Final EA should state this and include discussion paragraphs clarifying this opinion. Compliance with HRS § 205A-2 is an important component for satisfying the requirements of HRS Chapter 343.

3. Affordable Rental Housing (Special Plans Branch): Pursuant to Act 127, Session Laws of Hawaii 2016, a Special Action Team on affordable housing was established in 2016 to make recommendations on actions to promote affordable rental housing. One of the key goals of Act 127 is to achieve 22,500 affordable rental housing units by December 31, 2026. As this project seeks to develop 195 affordable rental units (out of a total of 324) on the Island of Maui, the Draft EA should include analysis on how this project aligns with the goals of Act 127.

4. Cultural Impact Assessment (Land Use Division): Only a draft Cultural Impact Assessment was submitted, with incomplete consultation and inadequate determination of whether traditional and customary practices of native Hawaiians would be affected. In accordance with Article XII, section 7 of the Hawaii Constitution and the *Kapaakai O KaAina v. Land Use Commission* Supreme Court decision, the Maui County Council must make specific findings and conclusions as to: (1) the identity and scope of "valued cultural, historical, or natural resources" in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area; (2) the extent to which those resources – including traditional and customary native Hawaiian rights will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the Maui County Council to reasonably protect native Hawaiian rights if they are found to exist.

We have no further comments at this time. If you have any questions regarding this comment letter, please contact Joshua Hekekia of our office at (808) 587-2845.

Sincerely,

Leo R. Asuncion
Director

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Leo R. Asuncion
Director, Office of Planning
235 South Beretania Street, 6th Floor
Honolulu, HI 96804

Dear Director Asuncion:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 10, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

The State Planning Act, HRS Chapter 226. The analysis on the Hawaii State Planning Act found in Section V.C, pages 50-58 of the Draft EA was incomplete. OP acknowledges that the analysis includes a partial analysis of the statutes in HRS Chapter 226 that are applicable to this project.

This evaluation does not include a complete examination of the remaining objectives and policies of Part I – Overall Theme, Goals, Objectives, and Policies, nor does it examine, or Part III – Priority Guidelines.

This analysis should include discussion on the project's ability to meet all parts of HRS Chapter 226, examine the project's consistency with these statutes, or clarify where it is in conflict. If the applicant deems the remaining statutes in HRS Chapter 226 are not applicable to this project, the Final EA should affirmatively state such determination followed by discussion paragraphs.

Response to comment:

The new EA will include a complete assessment of HRS Chapter 226.

Comment:

Hawaii CZM Program: The analysis on the Hawaii CZM Program, HRS § 205A-2 is incomplete. Section V, page 65-70 of Draft EA includes a discussion on eight of the 10 objectives and policies. In its current form, the Draft EA does not fully address HRS § 205A-2. The draft EA should include a complete examination of all 10 objectives and policies of HRS § 205A-2.

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(808)357-3842
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If there is a conflict with any portion of HRS § 205A-2, the Final EA should include what steps will be taken by the applicant to be compliant. If the applicant determines that the two remaining statutes are not applicable to the project, the Final EA should state this and include discussion paragraphs clarifying this opinion. Compliance with HRS § 205A-2 is an important component for satisfying the requirements of HRS Chapter 343.

Response to comment:

The new EA will fully address HRS §205A-2 and its objectives and policies.

Comment:

Affordable Rental Housing (Special Plans Branch): Pursuant to Act 127, Session Laws of Hawaii 2016, a Special Action Team on affordable housing was established in 2016 to make recommendations on actions to promote affordable rental housing. One of the key goals of Act 127 is to achieve 22,500 affordable rental housing units by December 31, 2026. As this project seeks to develop 195 affordable rental units (out of a total of 324) on the Island of Maui, the Draft DEA should include analysis on how this project aligns with the goals of Act 127.

Response to comment:

The new EA will address Act 127, Session Laws of Hawaii 2016.

Comment:

Cultural Impact Assessment (Land Use Division): Only a draft Cultural Impact Assessment was submitted, with incomplete consultation and inadequate determination of whether traditional and customary practices of native Hawaiians would be affected. In accordance with Article XII, section 7 of the Hawaii Constitution and the Kapaakai O KaAina v. Land Use Commission Supreme Court decision, the Maui County Council must make specific findings and conclusions as to: (1) the identity and scope of "valued traditional and customary native Hawaiian rights are exercised in this petition area; (2) the xetend to which those resources – including traditional and customer native Hawaiian rights will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the Maui County Council to reasonably protect native Hawaiian rights if they are found to exist.

Response to comment:

The new EA will include the completed Cultural Impact Assessment (CIA), an analysis of impacts on cultural resources and proposed mitigation measures, as may be appropriate.

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(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Again, thank you for your comments. Your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at (808) 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

Enclosure

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Dan Orodenker, Executive Officer
State of Hawai'i
State Land Use Commission
P.O. Box 2359
Honolulu, Hawai'i 96804

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Orodenker:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

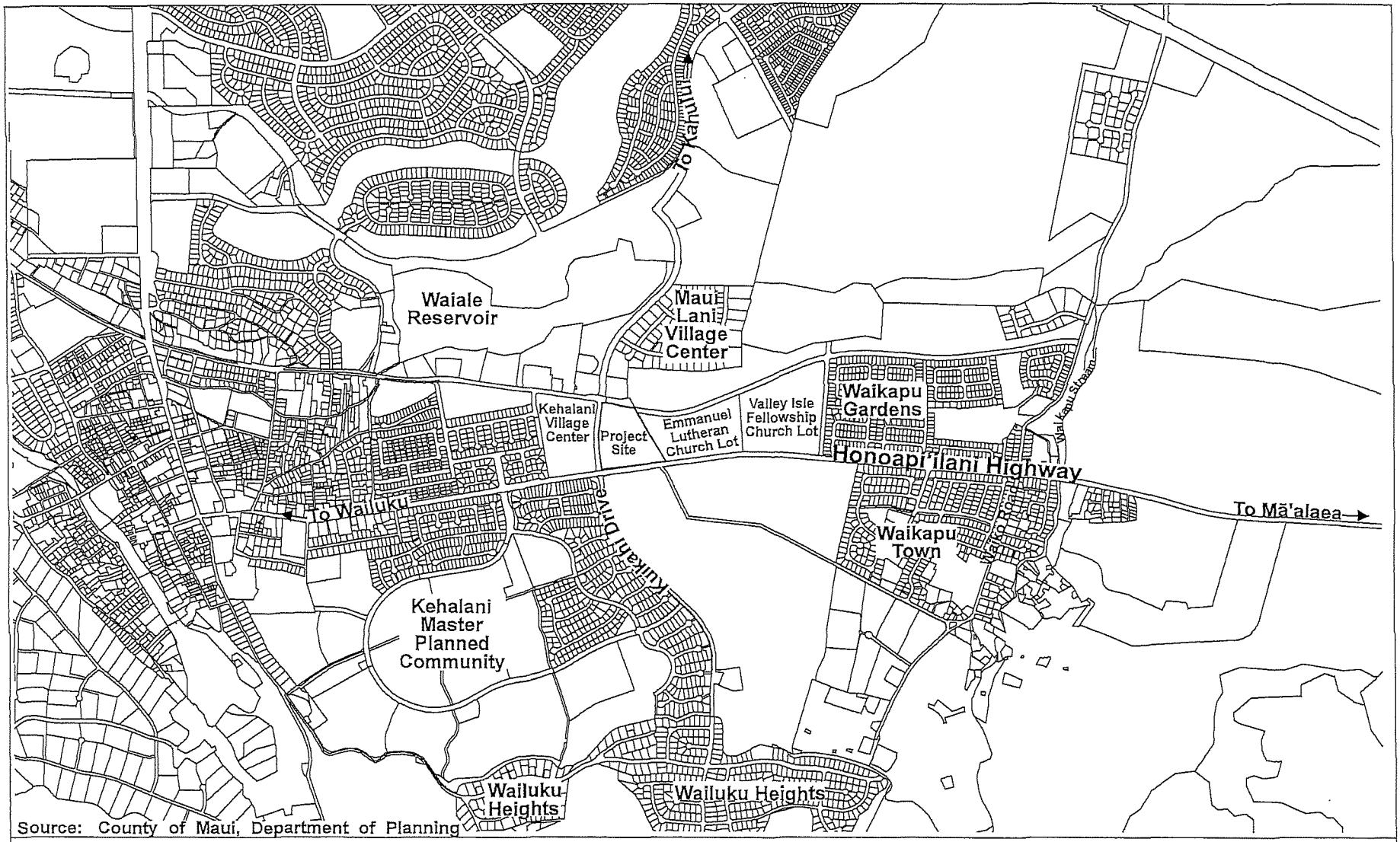


Figure 1

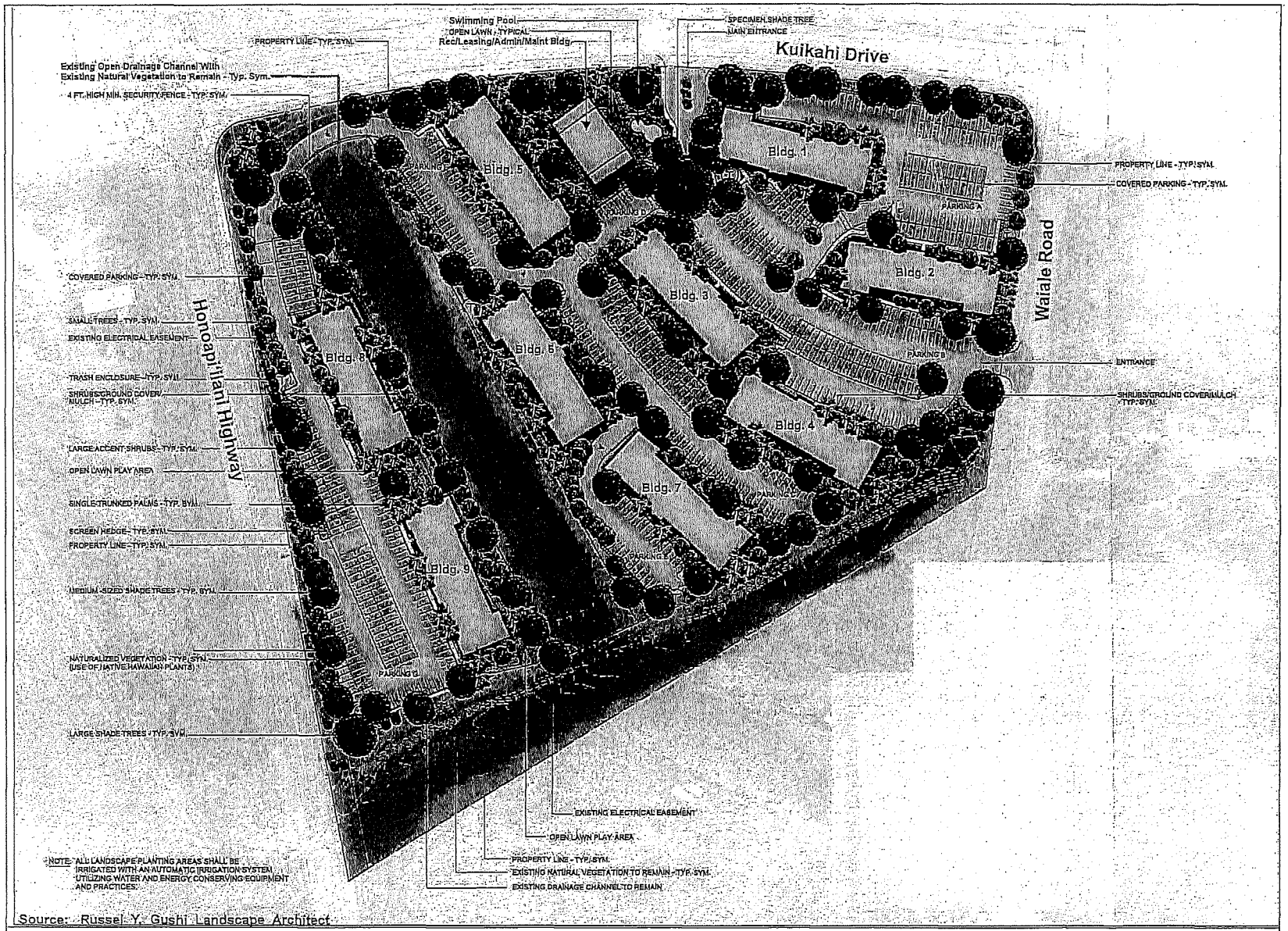
Wailuku Apartment Rental Housing Project
Regional Location Map

0 500 1,000 2,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\WailukuAfford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DAVID Y. IGE
Governor

LUIS P. SALAVERIA
Director
MARY ALICE EVANS
Deputy Director

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

DANIEL E. ORODENKER
Executive Officer

September 25, 2017

Mr. Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

Subject: Draft Environmental Assessment (EA) and Anticipated Findings of No Significant Impact (FONSI) for the Proposed Wailuku Apartment Rental Housing Project
Waiale Road, Wailuku, Maui, Hawaii
TMK: (2) 3-5-001: 064

We have reviewed the subject draft EA transmitted by your letter dated September 14, 2017.

We understand that the project site is located within the State Land Use Agricultural District, and that the development, identified as the Wailuku Apartment Rental Housing Project, will consist of 324 workforce apartment housing units on approximately 14.416 acres of land. The development will consist of 195 affordable apartment units to be made available for qualified individuals earning within 80 percent to 140 percent of the Maui median income as set forth by the affordable rent guidelines of the Hawaii Housing Finance and Development Corporation. The remaining 129 units of the development are planned to be priced at market rates. Proposed amenities include a recreational center, leasing offices, swimming pool, bar-b-que areas, and four children play areas.

We further understand that the Applicant, Legacy Wailuku LLC, intends to develop the project under the Hawaii Revised Statutes ("HRS") chapter 201H process and will request that the Maui County Council approve a State land use district boundary amendment to reclassify the approximately 14.416 acres of land for the workforce housing from the Agricultural District to the Urban District pursuant to HRS §205-3.1.

We note that the list of requested exemptions and deferrals that will be sought pursuant to HRS §201H-38 for the development includes exemptions from "...the need to file an

235 SOUTH BERETANIA STREET • SUITE 406 • HONOLULU, HAWAI'I 96813 • TEL: (808) 587-3822 • FAX: (808) 587-3827
EMAIL: dbedt.luc.web@hawaii.gov
MAILING ADDRESS: P. O. Box 2359, Honolulu, Hawai'i 96804

application for a boundary change/reclassification..." and "the procedures associated with such applications, including the requirement for the Maui Planning Commission to conduct a public hearing on the requested boundary change/reclassification...." Under the exemptions, the Maui County Council would still consider the boundary change, hold hearings, take evidence, act on the boundary change, and impose conditions of approval.

Please be advised that while HRS §201H-38 provides for an expedited 45-day processing timeframe for State district boundary changes and allows for certain exemptions from statutes, ordinances, charter provisions, and rules, we believe that these provisions do not extend to exemptions from the currently established procedural and hearing requirements involved in the processing of a boundary change. As the filing of an application formally initiates the boundary change process, exempting the project from this basic requirement raises a question as to whether a decision-making body could take action on a matter that may not have been properly noticed to the public and reviewed by the appropriate governmental agencies. The deliberate omission of an application for this project also calls into question whether such an exemption would appreciably contribute to the expeditious delivery of workforce housing. In fact, it may delay the process or result in a decision based on incomplete and/or inaccurate information. A FONSI is not an acceptable substitution for the application as it is intended as a document to address the environmental review process under HRS chapter 343, and not necessarily public notification requirements, among other things.

Exempting the project from the Planning Commission's public hearing process is similarly not supported by the statutory provisions of HRS §201H-38, and further may fail to serve the public trust responsibilities of the County as those whose rights would be most directly involved or most affected by the decision would not be accorded due process. There are no assurances that a hearing before the County Council would remedy this defect. In this case, we believe that the misuse of HRS §205-38 in the singular pursuit to deliver additional affordable housing regardless of how admirable the intentions may be compromises the statutory safeguards currently in place and, ultimately, the public's faith in the land use entitlement process.

With respect to the content requirements of the EA, pursuant to Hawaii Administrative Rules ("HAR") §11-200-10(5), a summary description of the affected environment should be provided. In this regard, the draft EA fails to include a discussion of the existing civil defense facilities in the area and on the potential impacts on such facilities from the project. Any proposed mitigation measures to address these impacts should also be discussed pursuant to HAR §11-200-10(7).

Additionally pursuant to §11-200-10(6), the EA should identify and summarize the alternatives considered. We acknowledge that the draft EA includes a section on alternatives on pages 71 to 72. However, we find that the discussion is inadequate as it describes only the negative impacts of the alternatives. Consideration should also be given to the positive impacts of the alternatives to the environment and public services and facilities.

Finally, pursuant to HAR §11-200-10(9), the EA should include findings and the reasons supporting the anticipated FONSI.

We have no further comments to offer at this time. Should you have any questions or require further clarification, please feel free to call our office at 587-3822.

Sincerely,

Daniel E. Orodenker
Executive Officer

c: Hawaii Housing Finance & Development Corporation

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Daniel E. Orodenker
Executive Officer
Land Use Commission
235 South Beretania Street, Suite 406
Honolulu, Hawaii 96813

Dear Mr. Orodenker:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated September 25, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

Exempting the project from the Planning Commission's public hearing process is similarly not supported by the statutory provisions of HRS §201H-38, and further may fail to serve the public trust responsibilities of the County as those whose rights would be most directly involved or most affected by the decision would not be accorded due process. There are no assurances that a hearing before the County Council would remedy this defect. In this case, we believe that the misuse of HRS §205-38 in the singular pursuit to deliver additional affordable housing regardless of how admirable the intentions may be compromises the statutory safeguards currently in place and, ultimately, the public's faith in the land use entitlement process.

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Response to comment:

The Applicant proposes to re-evaluate the requested exemptions to ensure the integrity of process requirements.

Comment:

With respect to the content requirements of the EA, pursuant to Hawaii Administrative Rules ("HAR") §11-200-10(5), a summary description of the affected environment should be provided. In this regard, the draft EA fails to include a discussion of the existing civil defense facilities in the area and on the potential impacts on such facilities from the project. Any proposed mitigation measures to address these impacts should also be discussed pursuant to HAR §11-200-10(7)

Response to comment:

The new EA will be prepared to address the content requirements of Chapter 343, Hawaii Revised Statutes (HRS) and Title 200 Department of Health, Hawaii Administrative Rules (HAR). As such, the new EA will include a discussion of the civil defense facilities in the area, potential impacts and proposed mitigation measures, as may be appropriate.

Comment:

Consideration should also be given to the positive impacts of the alternatives to the environment and public services and facilities.

Response to comment:

The new EA will include consideration to the positive impacts of the alternatives to the environment and public services and facilities.

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Comment:

Finally, pursuant to HAR §11-200-10(9), the EA should include findings and the reasons supporting the anticipated FONSI.

Response to comment:

The new EA will include findings and the reasons supporting the anticipated FONSI.

Again, thank you or your comments. Your comments and this response will be included in the new EA roe b prepared. If additional clarification is required, please contact me at (808) 357-3842.
Sincerely,

V. Bagoyo Development Consulting Group, LLC

Enclosure

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Stewart Stant, Director
County of Maui
Department of Environmental Management
2050 Main Street, Suite 2B
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Stant:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

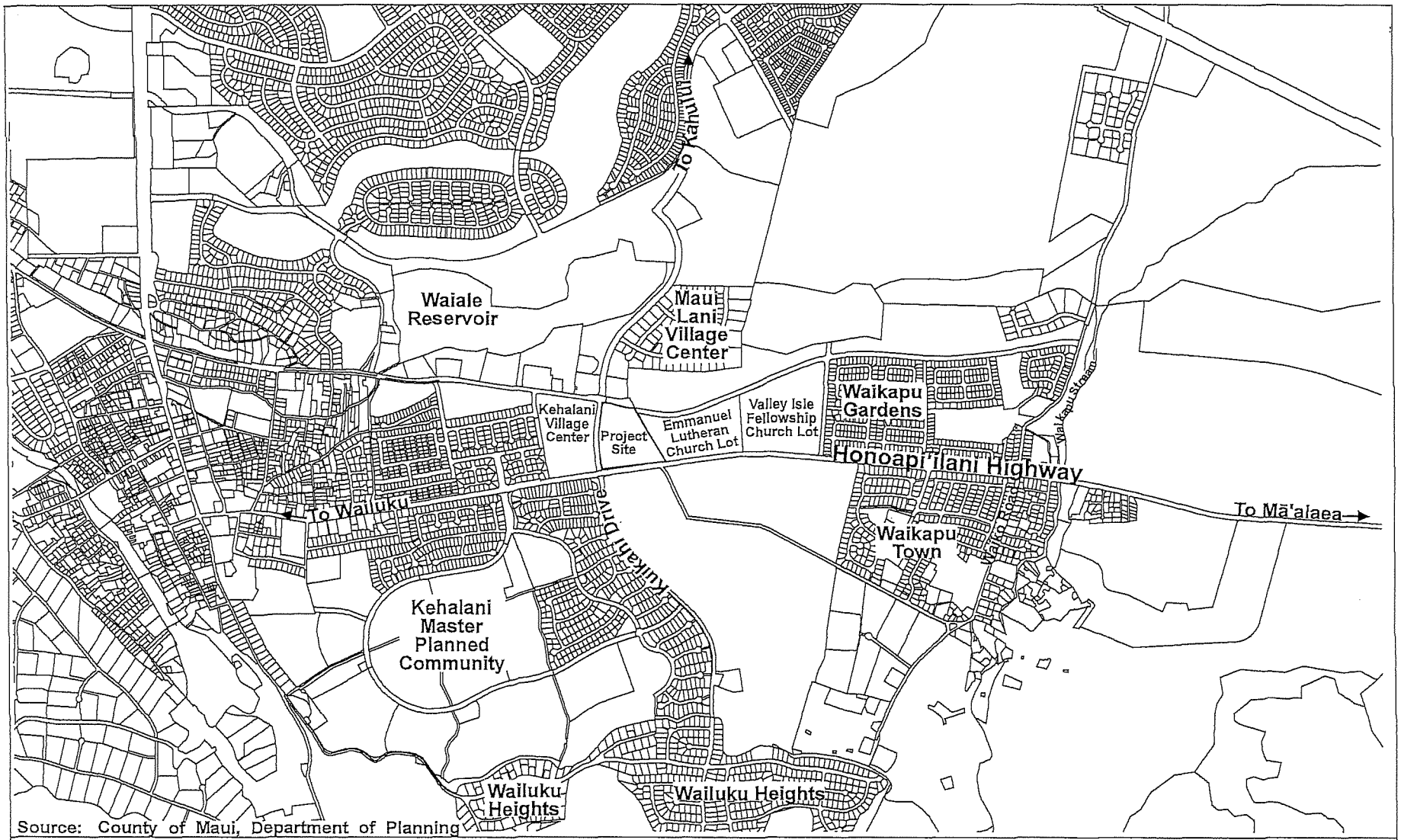


Figure 1

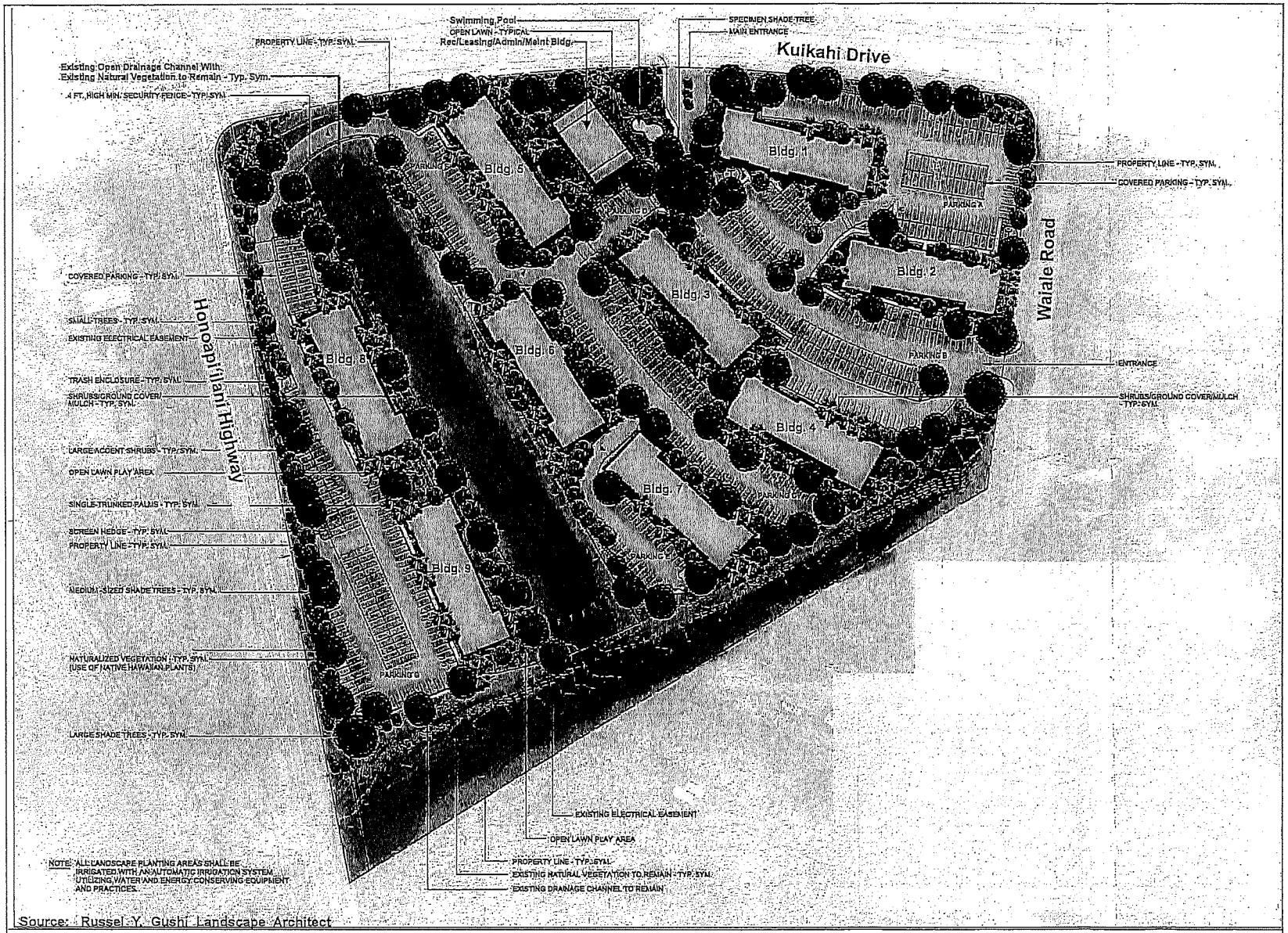
Wailuku Apartment Rental Housing Project
Regional Location Map

1,000 Feet
0 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

ALAN M. ARAKAWA
Mayor
STEWART STANT
Director
MICHAEL M. MIYAMOTO
Deputy Director

MICHAEL RATTE
Solid Waste Division
ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2050 MAIN STREET, SUITE 2B
WAILUKU, MAUI, HAWAII 96793

September 15, 2017

Mr. Vince Bagoyo
1500 Kilinoe Place
Wailuku, Hawaii 96793

**SUBJECT: WAILUKU APARTMENT RENTAL HOUSING PROJECT
DRAFT ENVIRONMENTAL ASSESSMENT AND
ANTICIPATED FINDINGS OF NO SIGNIFICANT IMPACT (FONSI)
TMK (2) 3-5-001:064, WAILUKU**

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:

   a. Developer shall apply to the Central Maui Landfill to dispose of construction waste and waste generated by project residents.

   b. Developer is correct in providing refuse service from a privately-managed source as County refuse service cannot be assured.

2. Wastewater Reclamation Division (WWRD) comments:

   a. Although wastewater system capacity is currently available as of the date of this letter, the developer should be informed that wastewater system capacity cannot be ensured until the issuance of the building permit.

   b. Provide discussion and calculations (sewer impact study) to substantiate that the existing wastewater system is adequate to serve this project.

   c. Wastewater contribution calculations are required before building permit is issued.

d. Developer is not required to pay assessment fees for this area at the current time.

e. Developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.

f. Sewage calculations required to substantiate the slopes of the proposed sewer lines.

g. Show or list minimum slope of new sewer laterals.

h. Plans should shall the installation of a single service lateral and property sewer service manhole near the property line.

i. Commercial kitchen facilities and swimming pools 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 letter, please contact Michael Miyamoto at 270-8230.

Sincerely,

MICHAEL M. MIYAMOTO
Deputy Director of Environmental Management

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Michael M. Miyamoto
Deputy Director of Environmental Management
2050 Main Street, Suite 28
Wailuku, Maui 96793

Dear Deputy Director Miyamoto:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated September 15, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

1. *Solid Waste Division Comments:*
    a. *Developer shall apply to the Central Maui Landfill to dispose of construction waste and waste generated by project residents.*
    b. *Developer is correct in providing refuse service from a privately-managed source as County refuse service cannot be assured.*

Response to comment:

As applicable, the applicant will comply with the comments of the Solid Waste Division.

Comment:

2. *Wastewater Reclamation Division (WWRD) comments:*
    a. *Although wastewater system capacity is currently available as of the date of this letter, the developer should be informed that wastewater system capacity cannot be ensured until the issuance of the building permit.*
    b. *Provide discussion and calculations (sewer impact study) to substantiate that the existing wastewater system is adequate to service this project.*

Response to comment:

We acknowledge that while wastewater system capacity is currently available to serve the project we acknowledge such capacity cannot be guaranteed in the future. As such, the applicant will coordinate the project with the Department of Environmental Management to ensure available

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

capacity will be available for the proposed project. As requested, discussion and calculations will be provided during building permit application to substantiate that the existing wastewater system is adequate to service the project.

Comment:

c. *Wastewater contribution calculations are required before building permit is issued.*
d. *Developer is not required to pay assessment fees for this area at the current time.*
e. *Developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.*

Response to comments:

The applicant acknowledges wastewater contribution calculations are not required before building permit is issued and sewer assessment fees are not required at this time. However, the applicant acknowledges that the applicant is required to fund any necessary off-site improvements to the collection system and wastewater pump stations to accommodate their project.

Comments:

f. *Sewage calculations required to substantiate the slopes of the proposed sewer lines.*
g. *Show or list minimum slope of new sewer laterals.*

Response to comments:

As applicable, sewage calculations to substantiate the slope of the proposed sewer lines, including the minimum slope of new sewer laterals, will be provided at the time building permits are applied for.

Comments:

h. *Plans should shall the installation of a single service lateral and property sewer service manhole near the property line.*
i. *Commercial kitchen facilities and swimming pools 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.*

Response to comments:

As applicable, the applicant will comply with the above requirements of the Wastewater Reclamation Division during building permit application.

Again, thank you for your comments. Your comments and this response letter will be included in the new EA prepared for the project. If additional clarification is required, please contact met at 357-3842.

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Sincerely,

V. Bagoyo Development Consulting Group, LLC

Enclosure

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Jeffrey A. Murray, Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawai'i 96732

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Chief Murray:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

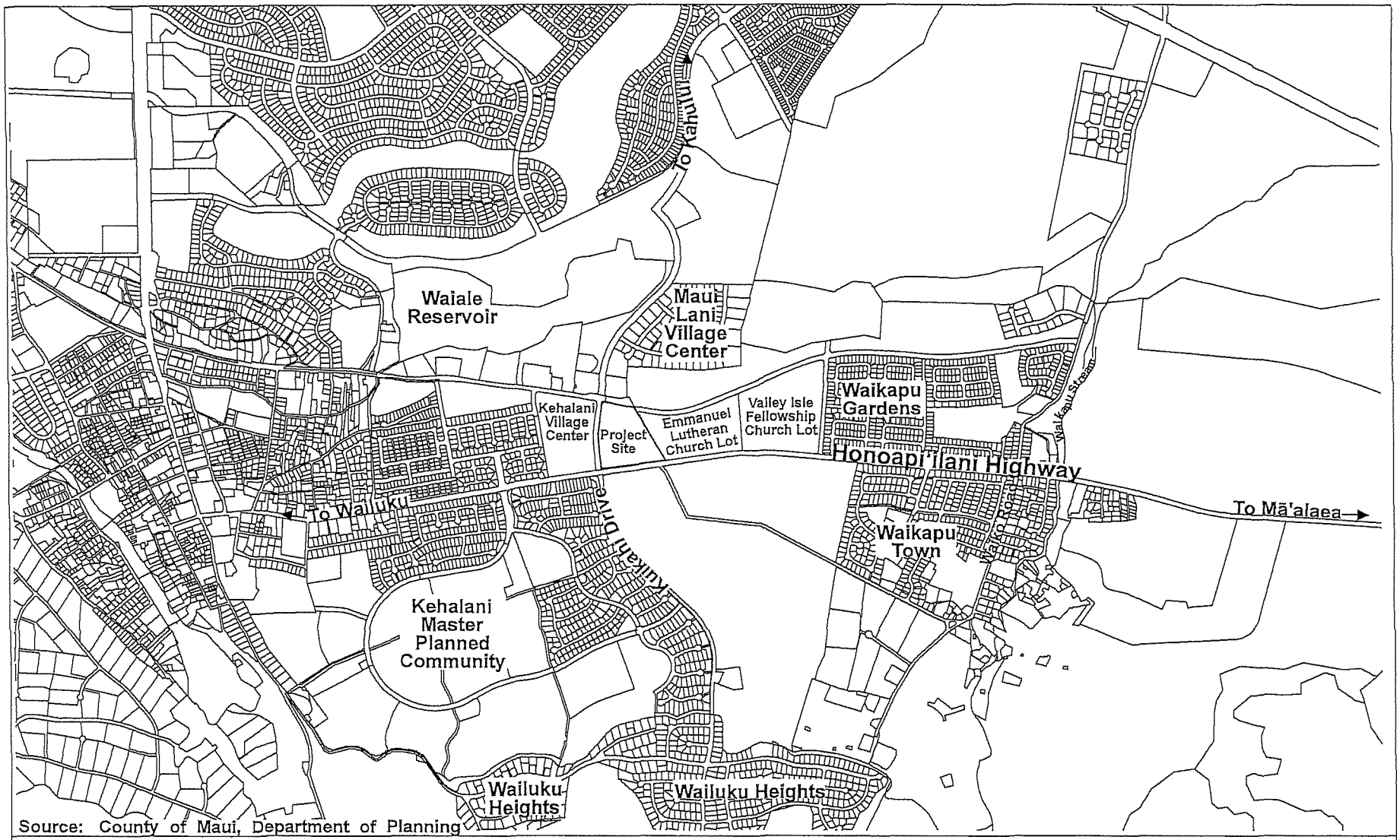
Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc



Source: County of Maui, Department of Planning

Figure 1

Wailuku Apartment Rental Housing Project

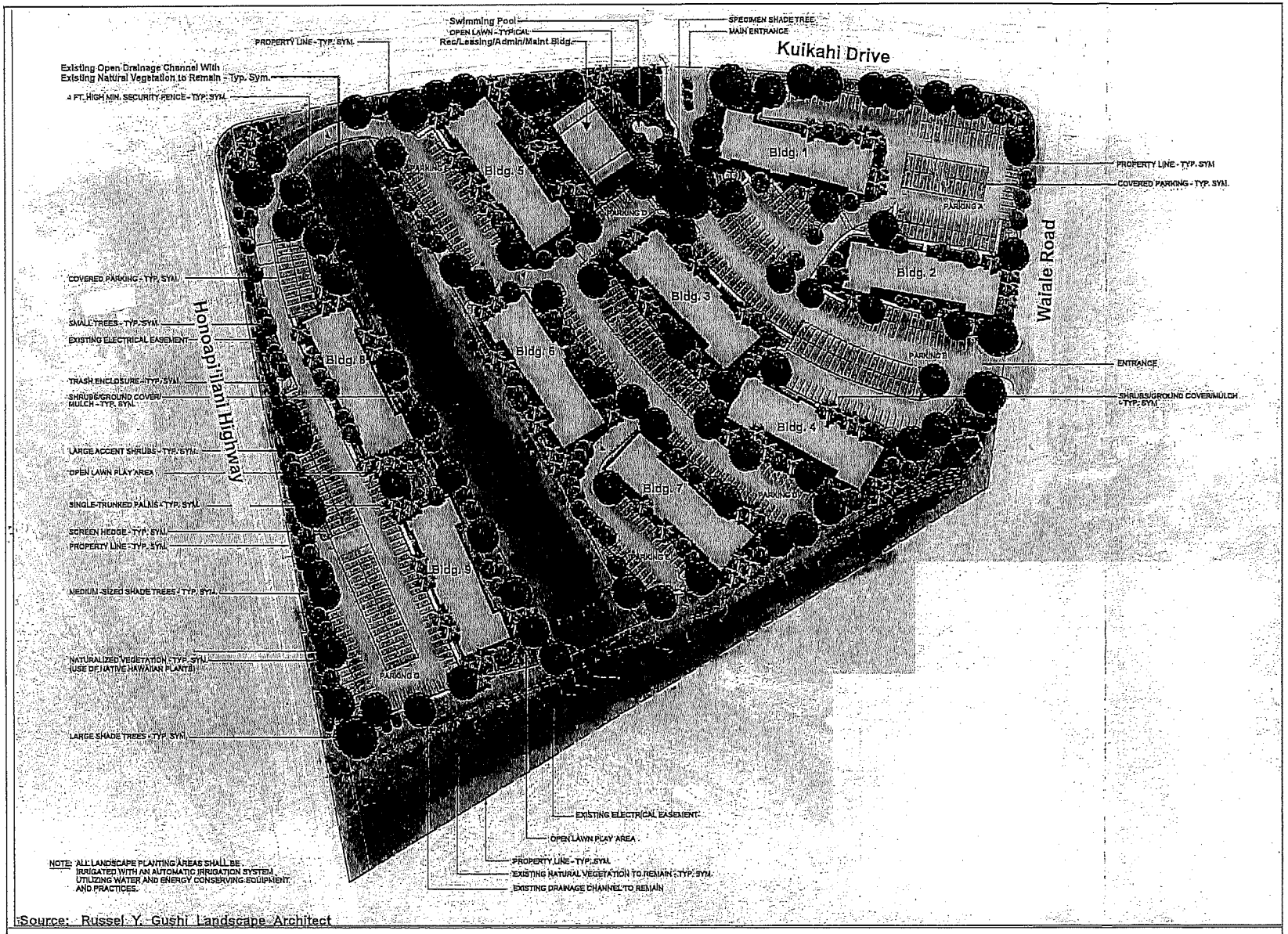
Regional Location Map

1,000 0 Feet 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

Alan M. Arakawa
Mayor

Jeffrey A. Murray
Fire Chief

Robert M. Shimada
Deputy Fire Chief

County of Maui
Department of Fire and Public Safety
Fire Prevention Bureau

313 Manea Place ☐ Wailuku, Hawaii 96793
(808) 876-4690 ☐ fax (808) 244-1363

November 2, 2017

Bagoyo Development Consulting Group
Mr. Vince Bagoyo
1500 Kilinoe Place
Wailuku, HI 96793

Re: Proposed Wailuku Apartment Rental Housing Project – DEA-AFONSI
Waiale Road, Wailuku, HI
(2) 3-5-001: 064

Dear Mr. Bagoyo,

Thank you for allowing our office to provide comment on the subject proposed project. As per your request, comments are provided below:

- There are no comments or objections in regards to the information provided as part of the DEA-AFONSI for the subject project.

- Our office does reserve the right to comment on the proposed project during the building permit review process when detailed plans for this project are routed to our office for review. At that time, fire department access, water supply for fire protection, and fire and life safety requirements will be addressed.

If there are any questions or comments, please feel free to contact me at (808) 876-4693 or by email at paul.haake@mauicounty.gov.

Sincerely,

Paul Haake
Captain, Fire Prevention Bureau

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Paul Haake
Captain, Fire Prevention Bureau
County of Maui
Department of Fire and Public Safety
313 Manea Place
Wailuku, Hawaii 96793

Dear Captain Haake:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we acknowledge the receipt of your letter, dated November 2, 2017, which had no comments or objections to the information provided in the DEA-AFONSI, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We also acknowledge that your office does reserve the right to comment on the proposed project during the building permit review process when detailed plans for this project are routed to your office for review. At such time, fire department access, water supply for fire protection, and fire and life safety requirements will be addressed.

Again, thank you for your comments. Your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Carol Reimann, Director
County of Maui
Department of Housing and Human Concerns
One Main Plaza
2200 Main Street, Suite 546
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Reimann:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

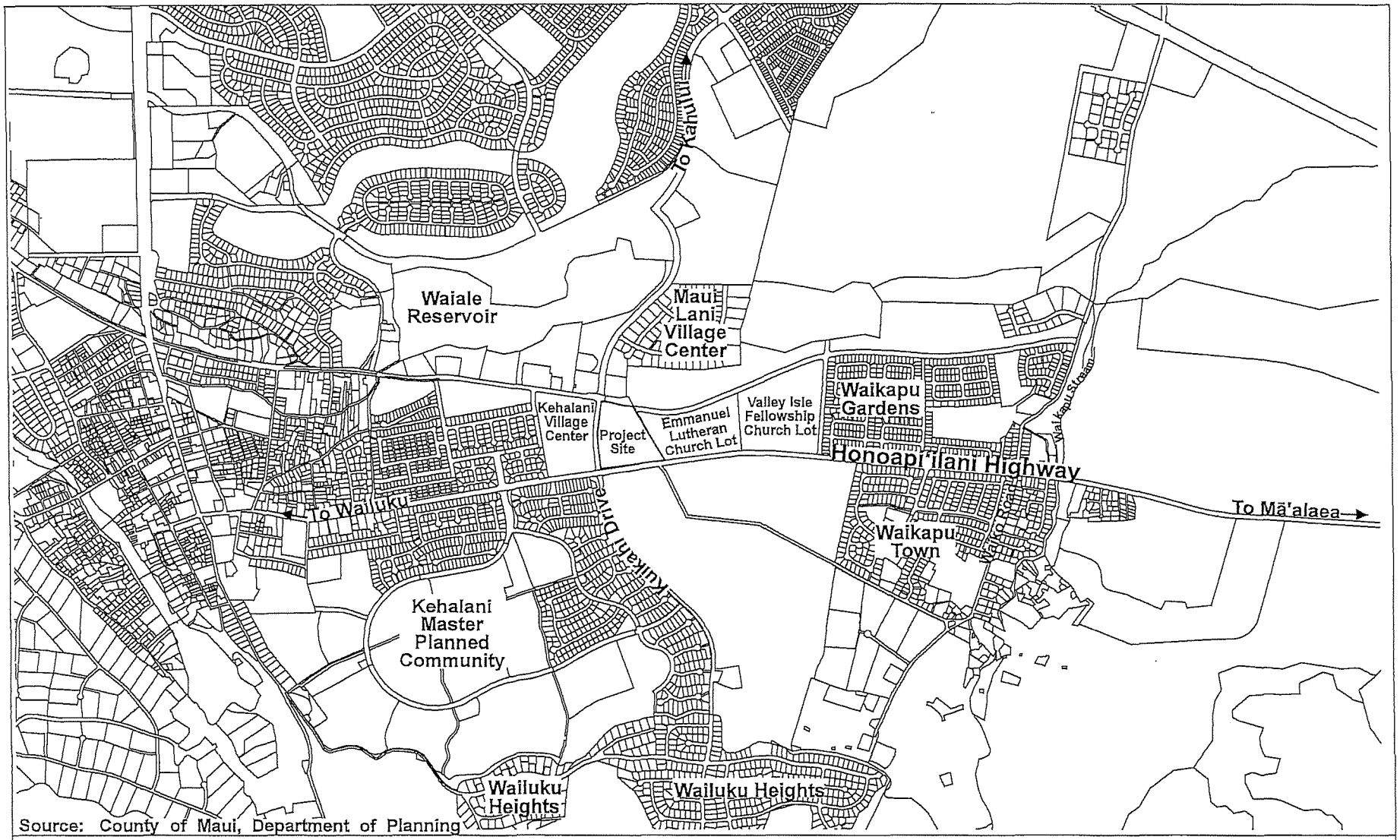


Figure 1

Wailuku Apartment Rental Housing Project

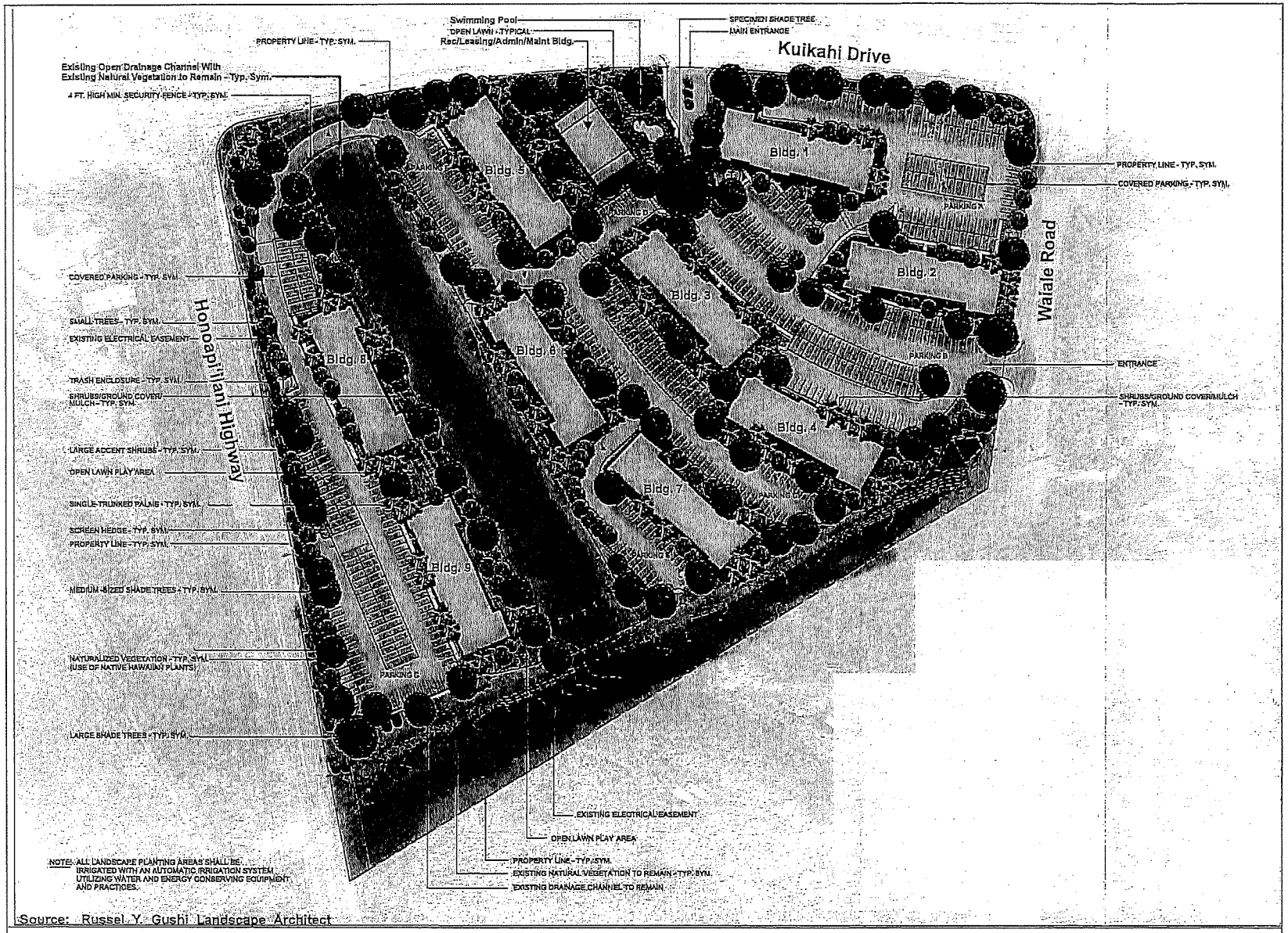
Regional Location Map

0 500 1,000 2,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

ALAN M. ARAKAWA
Mayor
CAROL K. REIMANN
Director
JAN SHISI IIDO
Deputy Director

2200 MAIN STREET • SUITE 546 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7805 • FAX (808) 270-7165
MAILING ADDRESS: 200 SOUTH HIGH STREET • WAILUKU, HAWAII 96793 • EMAIL: director.hhc@mauicounty.gov

November 15, 2017

Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE WAILUKU APARTMENTS RENTAL HOUSING PROJECT
TMK (2) 3-5-001:064

The Department of Housing and Human Concerns has reviewed the Draft Environmental Assessment (DEA) Report for the Wailuku Apartments Rental Housing Project 201H Application.

The Department's review, per Chapter 343, does not note any environmental impacts relating to the project.

Please note the Department's comments are not meant to be a FONSI under Chapter 343, and the Department is not reviewing the EA or the 201H application as it is under the jurisdiction of HHFDC.

Sincerely,

CAROL K. REIMANN
Director of Housing and Human Concerns

xc: Linda Schatz, Schatz Collaborative LLC
Buddy Almeida, Housing Administrator

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Carol K. Reimann
Director of Housing and Human Concerns
Maui County
2200 Main Street, Suite 546
Wailuku, Hawaii 96793

Dear Director Reimann:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments, please be advised that the DEA will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We acknowledge that your Department did not note any environmental impacts and that the Hawaii Housing Finance and Development Corporation (HHFDC) will be the accepting authority for the EA, as well as process the 201H-38 Hawaii Revised Statues housing application.

Again, thank you for your comments. Your letter and this response letter will be included in the new EA. If additional clarification is required, please contact me at 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Ka'ala Buenconsejo, Director
County of Maui
Department of Parks and Recreation
700 Halia Nakoa Street, Unit 2F
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Buenconsejo:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

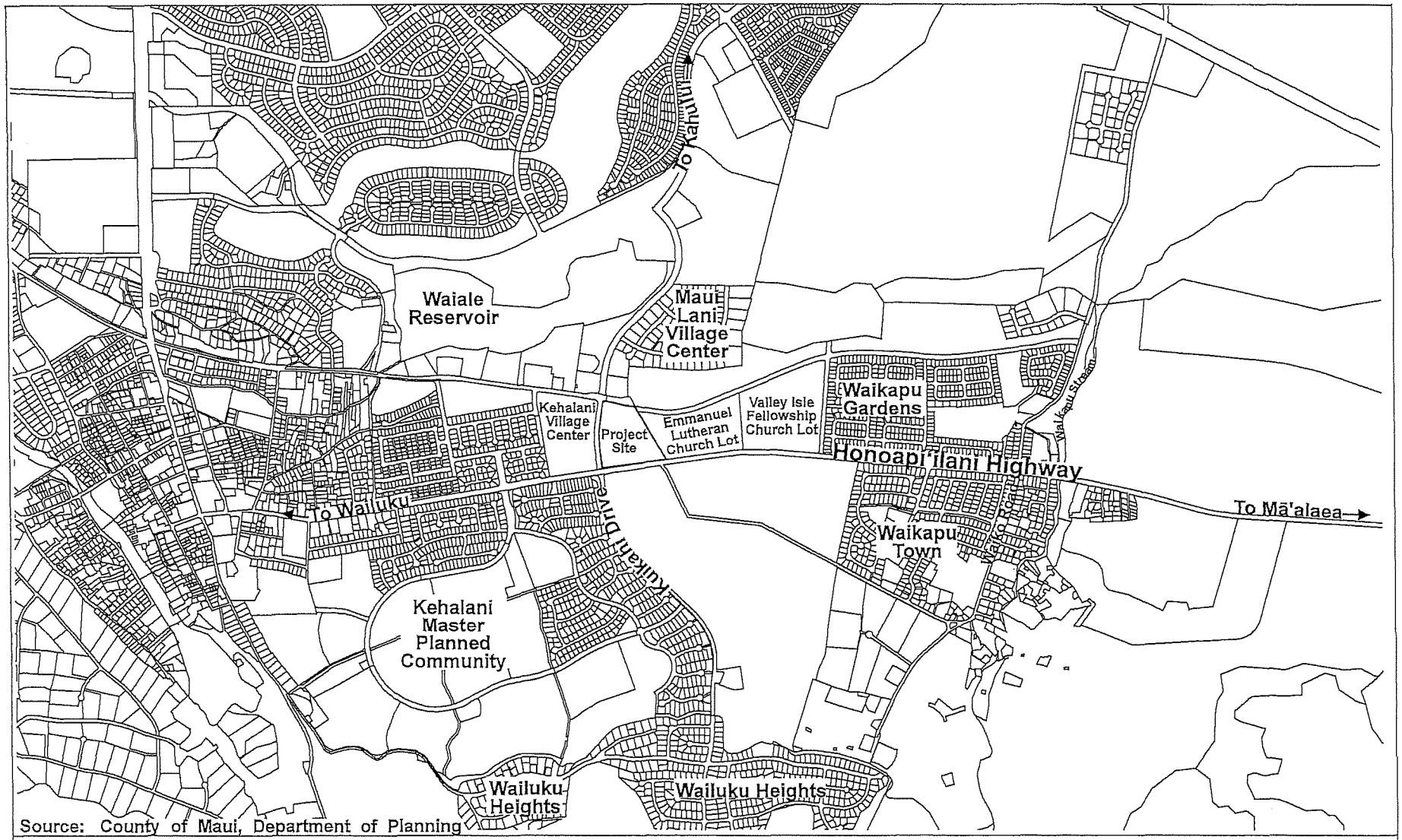


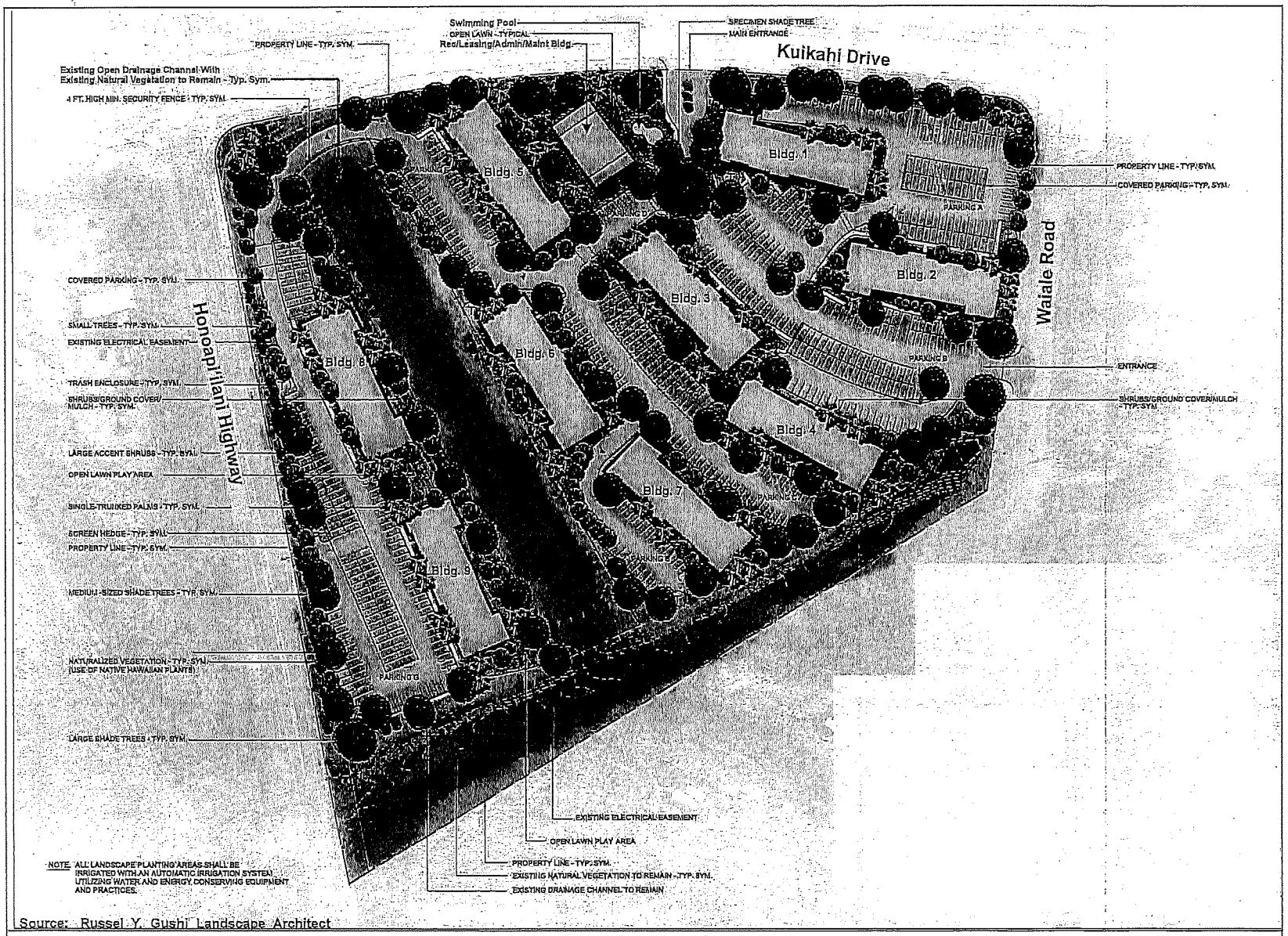
Figure 1

Wailuku Apartment Rental Housing Project
Regional Location Map

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

ALAN M. ARAKAWA
Mayor

KA'ALA BUENCONSEJO
Director

BRIANNE L. SAVAGE
Deputy Director

(808) 270-7230
FAX (808) 270-7934

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

October 20, 2017

Mr. Vince Bagoyo, Project Consultant
1500 Kilinoe Pl.
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT AND ANTICIPATED FINDINGS OF NO SIGNIFICANT IMPACT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT, LOCATED AT TMK: (2) 3-5-001:064, WAIALE ROAD, WAILUKU, MAUI, HAWAII

Thank you for the opportunity to review and comment on the subject project. The Department of Parks and Recreation (DPR) does not have any comments or objections to the project. Once the applicant provides DPR with a copy of the fully executed 201H HRS affordable housing agreement with the Department of Housing and Human Concerns, DPR will provide exemption from Maui County Code Section 18.16.320 Parks and Playgrounds.

Should you have any questions or concerns, please feel free to call me, or Robert Halvorson, Chief of Planning and Development, at 270-7931.

Sincerely,

KA'ALA BUENCONSEJO
Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning and Development

KB:RH:csa

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Ka'ala Buenconsejo
Director of Parks & Recreation
Maui County
700 Hali'a Nakoa Street, Unit 2
Wailuku, Hawaii 96793

Dear Mr. Buenconsejo:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to acknowledge the receipt of your letter, dated October 20, 2017, which had no comments or objections, please be advised that the DEA will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

Again, thank you for your comments. Your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064; Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

William Spence, Director
County of Maui
Department of Planning
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Spence:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

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On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

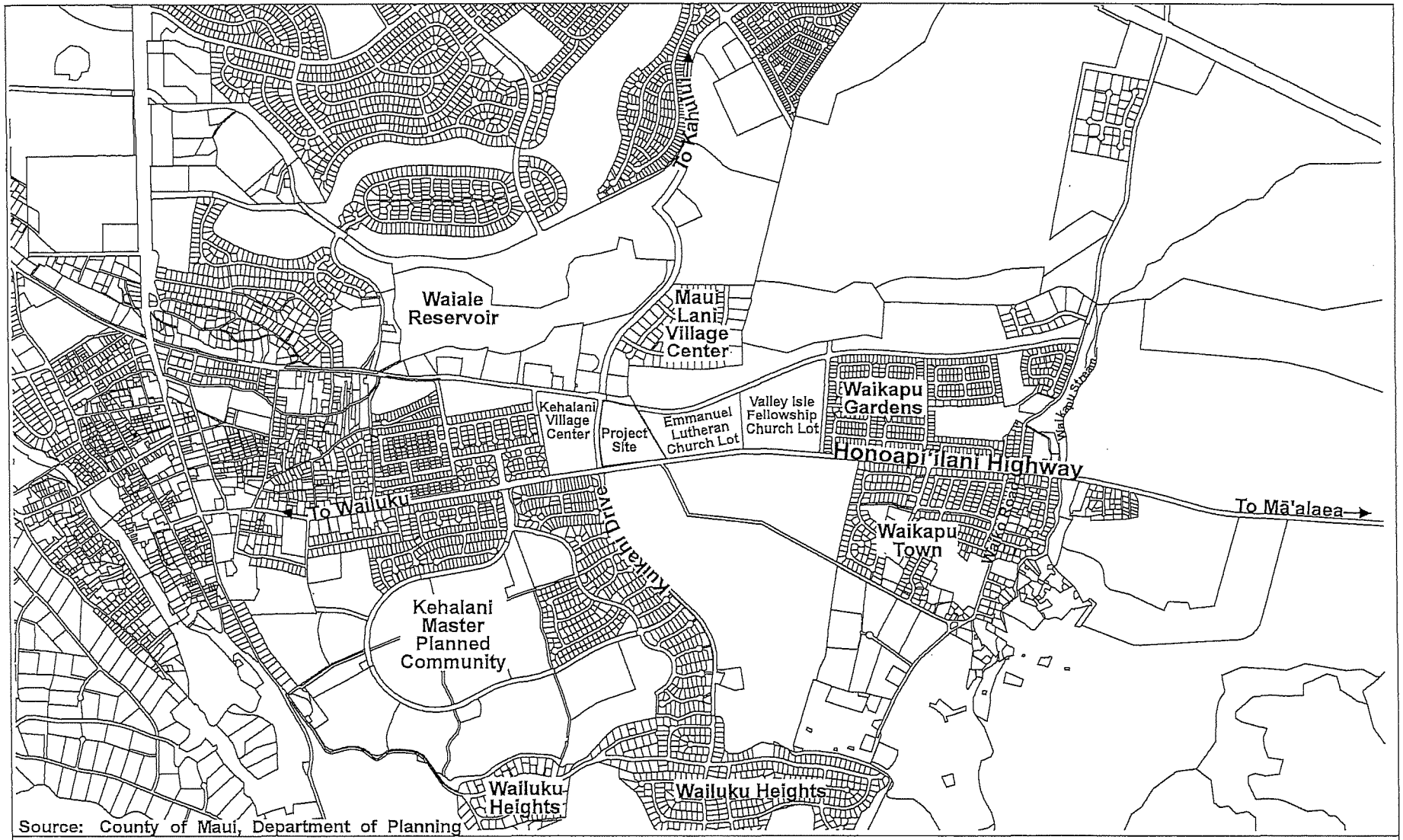


Figure 1

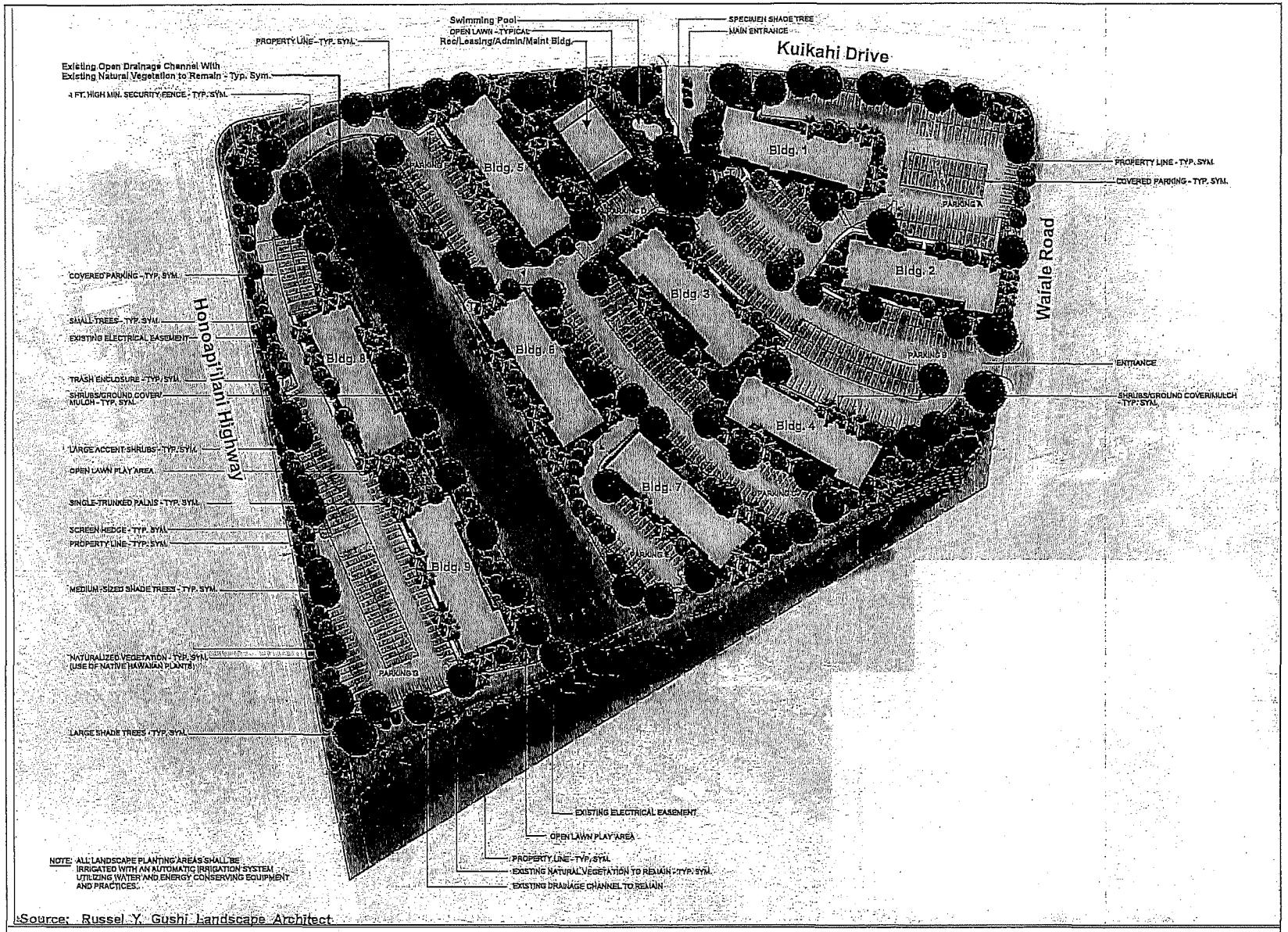
Wailuku Apartment Rental Housing Project
Regional Location Map

1,000 0 Feet 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project
Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI

DEPARTMENT OF PLANNING

November 3, 2017

Mr. Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT, WAILUKU, ISLAND OF MAUI, HAWAII; TMK: (2) 3-5-001:064 (RFC 2017/0096)

The Department of Planning (Department) is in receipt of the above-referenced document for the proposed Wailuku Apartment Rental Housing Project. The Department understands that the proposed action involves development of approximately 324 apartments of which 60 percent will be affordable and 40 percent will be market rate units. The proposed units will consist of studio, one-bedroom, two-bedroom and three-bedroom units with floor areas ranging from approximately 400-950 square feet. The project will include amenities that will include four (4) play areas, a recreation center, swimming pool, barbecue area and leasing office areas. Based on the foregoing, the Department provides the following comments in preparation of the Final EA.

1. On the Zoning and Flood Confirmation Form, the Community Plan designation says that it's "Future Growth Reserve"; however, on page 7, in the "Existing Land Use Designations" portion, it says the Community Plan designation is "Agriculture." Also, throughout the document, it references the Community Plan as being "Agriculture." For the Final EA, please include the correct designation and discussion.

2. In the Scenic and Open Space Resources section, it says the property has partial views of east Maui and Haleakala; but yet the project is not part of a scenic corridor. To mitigate any view impact, the buildings will be set at lower elevations. Because the buildings are proposed to be three-story structures and the average slope from Honoapiilani Highway is slight at about 5%, it would be beneficial to see a view analysis. For the Final EA, please provide a "before" and "after" view analysis from publicly accessible vantage points along Honoapiilani Highway.

3. On page 34, under the "Economy" section, there is a paragraph about the Kihei-Makena Community Plan region. Please replace this with information on the Wailuku-Kahului Community Plan region, since this project is proposed for Wailuku.

4. On page 37, it says the proposed action is not a population generator that will increase population parameters within the Kahului-." While this may be true, it will still draw families who are currently living in other areas on Maui; hence, there will still be an impact on the State Department of Education (DOE) schools that service the region. For the Final EA, we recommend coordination with the Maui DOE to ensure that there is sufficient space and/or to fulfill fair share contribution requirements.

5. Four (4) parks are currently being proposed. There are no proposed park concepts. We recommend coordination with the County of Maui Parks and Recreation Department to determine park needs, any dedication requirements, if that is being planned, or any fair share contribution requirements. Please also provide park plans/renderings for the Final EA.

6. A preliminary landscape plan was provided and it was in color; however, there were no colored renderings of the buildings included in the Draft EA. For the Final EA, please provide colored renderings so that it would be possible to envision what the project will look like once built. Will the buildings be a specific color so as to blend in with the surrounding landscape?

7. On page 71, in the "Alternatives to the Proposed Action" section, there are alternatives for what is currently being proposed, an agriculture subdivision and what will happen if there is no action. There are no alternative density options. Currently, 324 units are being proposed and the proposed structures will be three-story. Exemptions are being sought for the two (2) space parking requirement so that 1.5 spaces can be provided. Because the units will be affordable, there will be families interested in renting the units, and they may have multiple cars. Perhaps if less units were offered, the Applicant can still provide a number of affordable rentals, as well as meet the two (2) stall minimum requirement. Another exemption is being sought to the A-2 Apartment District Building Height Definition 19.04.040. If other lower density options are considered, such as two-story structures, perhaps the exemption would be unnecessary. Can you please include a lower density options into the analysis?

Thank you for the opportunity to comment. Please include the Department on the distribution list for the Final EA.

Should you require further clarification, please contact Staff Planner Tara Furukawa by email at tara.furukawa@mauicounty.gov or by phone at (808) 270-7520.

Sincerely,

WILLIAM SPENCE
Planning Director

xc: Clayton I. Yoshida, Planning Program Administrator (PDF)
John S. Rapacz, Planning Program Administrator (PDF)
Tara K. Furukawa, Staff Planner (PDF)
Project File
General File

WRS:TKF:ela
K:\WP_DOCS\PLANNING\RFC\2017\0096_WailukuAptRentalHousing\Agency Response.doc

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

William Spence
Planning Director
County of Maui
2200 Main Street
One Main Plaza, Suite 315
Wailuku, Maui 96793

Dear Director Spence:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that that the DEA, which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated November 3, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

On the Zoning and Flood Confirmation Form, the Community Plan designate says that it's "Future Growth Reserve"; however, on page 7, in the "Existing Land Use Designations" portion, it says the Community Plan designation is "Agriculture." Also, through the document, it references the Community Plan as being "Agriculture." For the Final EA, please include the correct designation and discussion.

Response to comment:

As requested, the land use designations on the Zoning and Confirmation form will be included in the new EA.

Comment:

In the Scenic and Open Space Resources section, it says the property has partial views of east Maui and Haleakala; but yet the project is not part of a scenic corridor. To mitigate any view impact, the buildings will be set at lower elevations. Because the buildings are proposed to be three-story structures and the average slope from Honoapiilani Highway is slight at about 5%, it would be beneficial to see a view analysis. For the Final EA, please provide a "before" and "after" view analysis from publicly accessible vantage points along Honoapiilani Highway.

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Response to comment:

As requested, the architect will be requested to provide a view analysis of the project from Honoapiilani Highway to be included in the new EA.

Comment:

On page 34, under the "Economy" section, there is a paragraph about the Kihei-Makena Community Plan region. Please replace this with information on the Wailuku-Kahului Community Plan region, since this project is proposed for Wailuku.

Response to comment:

As requested, the correct Community Plan region will be identified in the new EA.

Comment:

On page 37, it says the proposed action is not a population generator that will increase population parameters within the Kahului-." While this may be true, it will still draw families who are currently living in other areas on Maui; hence, there will still be an impact on the State Department of Education (DOE) schools that service the region. For the Final EA, we recommend coordination with the Maui DOE to ensure that there is sufficient space and/or to fulfill fair share contribution requirements.

Response to comment:

The Department of Education (DOE) provided comments on the Draft EA, which will be included in the new EA to be prepared. Further, the DOE will be contacted to provide additional input on educational facilities within the project area. As advised by the DOE, the applicant will not be seeking any exemptions from the Central Maui School impact fees and will contribute to the required impact fees as a proposed mitigative measure.

Comment:

Four (4) parks are currently being proposed. There are no proposed park concepts. We recommend coordination with the County of Maui Parks and Recreation Department to determine park needs, any dedication requirements, if that is being planned, or any fair share contribution requirements. Please also provide park plans/renderings for the Final EA.

Response to comment:

The Applicant will provide some recreational amenities for the project in the form of the four play areas, as well as a swimming pool, recreation center and barbecue areas. The Applicant will, during the new EA process will continue consultation with the Department of Parks and Recreation regarding proposed 201-H exemptions.

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Comment:

A preliminary landscape plan was provided and it was in color; however there were no colored renderings of the buildings included in the Draft EA. For the Final EA, please provide colored renderings so that it would be possible to envision what the project will look like once built. Will the buildings be a specific color so as to blend in with the surrounding landscape?

Response to comment:

As requested, colored rendering of the project shall be included in the new EA.

Comment:

On page 71, in the "Alternatives to the Proposed Action" section, there are alternatives for what is currently being proposed, an agricultural subdivision and what will happen if there is no action. There are no alternative density options. Currently, 324 units are being proposed and the proposed structures will be three-story. Exemptions are being south for two (2) space parking requirement so that 1.5 spaces can be provided. Because the units will be affordable, there will be families interested in renting these units, and they may have multiple cars. Perhaps if less units were offered, the Applicant can still provide a number of affordable rentals, as well as meet the two (2) stall minimum requirement. Another exemption is being sought to the A-2 Apartment District Building Height Definition 19.04.040. If other lower density options are considered such as two-story structures, perhaps the exemption would be unnecessary. Can you please include a lower density options into the analysis?

Response to comment:

The new EA shall expand on the Alternatives considered including the various conceptual site plans that were considered prior to selection of the preferred alternative. In order to achieve feasibility for the project we are constrained to a certain level of density in order to spread fixed costs such as off-site improvements and site work over 324 units.

Regarding the parking spaces for the subject project the Applicant will comply with applicable parking ratio requirements.

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(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Again, thank you for your comments. Your letter and this response letter will be included in the new EA. If additional clarification is require, please contact me at 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

Enclosure

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Tivoli Faaumu, Chief
County of Maui
Police Department
55 Mahalani Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Chief Faaumu:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

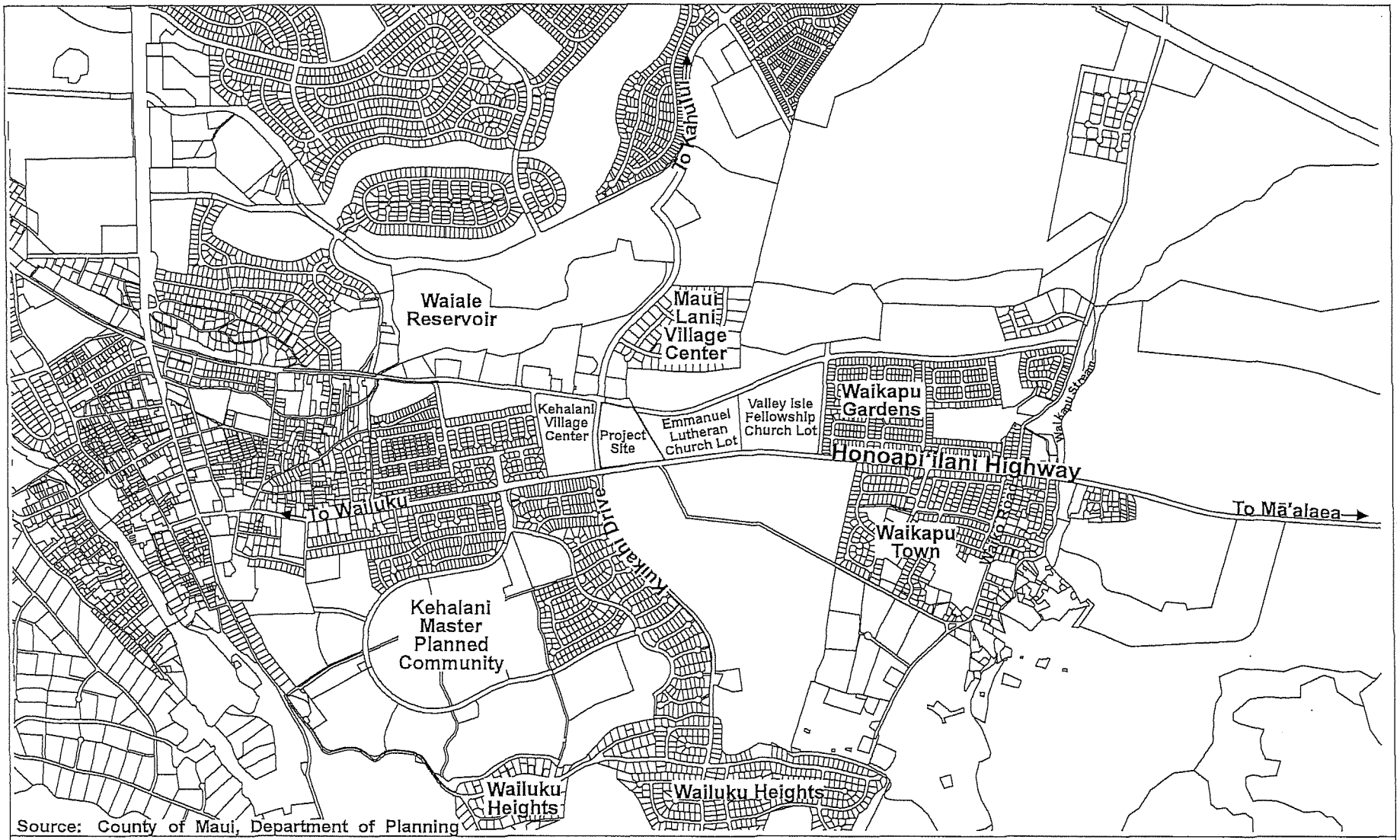


Figure 1

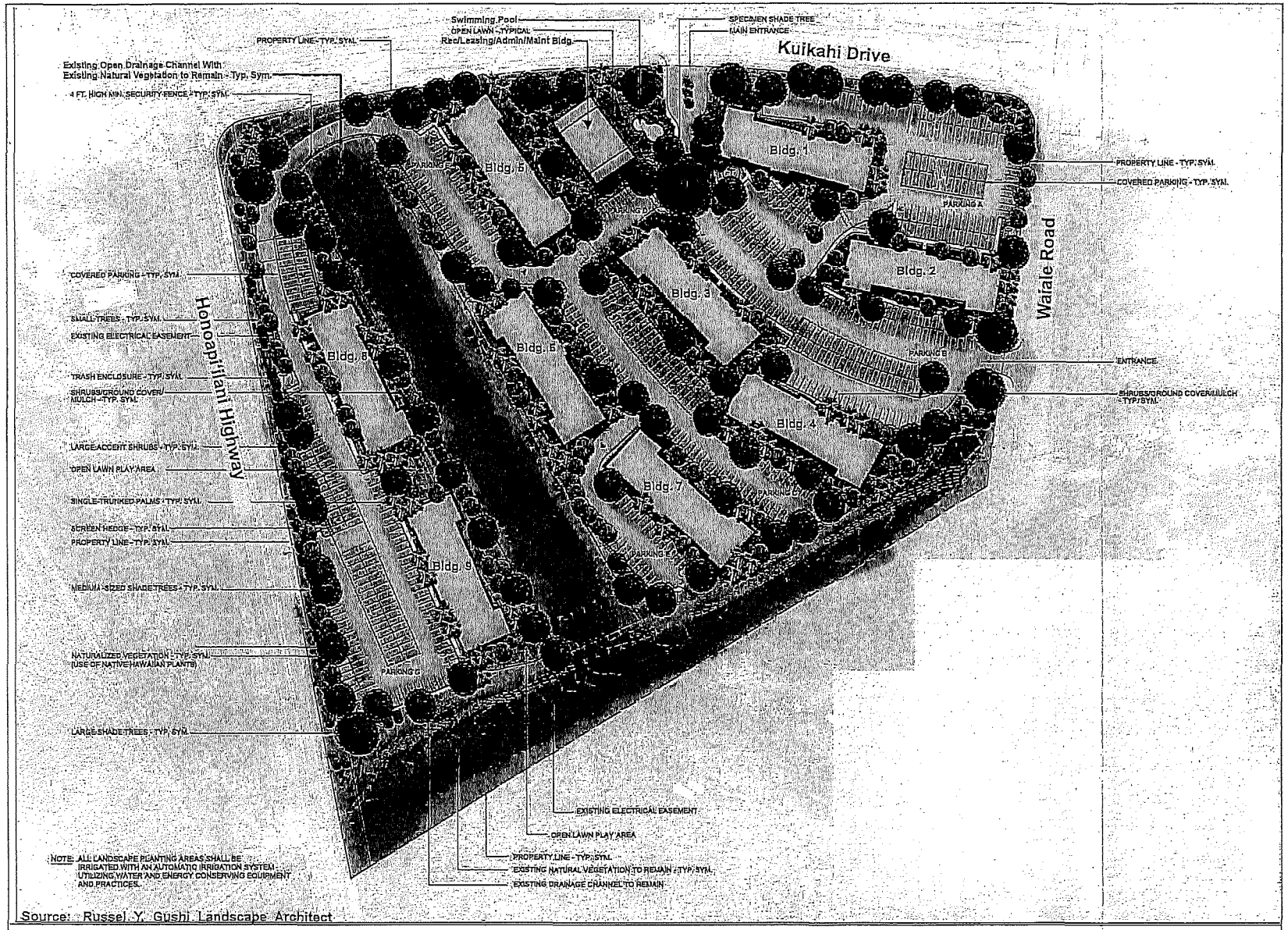
Wailuku Apartment Rental Housing Project
Regional Location Map

1,000 Feet
0 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

POLICE DEPARTMENT
COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

TIVOLI S. FAAUMU
CHIEF OF POLICE

DEAN M. RICKARD
DEPUTY CHIEF OF POLICE

October 19, 2017

Mr. Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: Draft Environmental Assessment and Anticipated Findings of No Significant Impact for the Proposed Wailuku Apartment Rental Housing Project Located at TMK: (2) 3-5-001:064, Waiale Road, Wailuku, Maui, Hawaii

This is in response to your letter dated September 11, 2017, requesting comments on the above subject.

We have received the information submitted and have enclosed a copy of our comments and recommendations.

Thank you for giving us the opportunity to comment on this project.

Sincerely,

Assistant Chief John Jakubczak
for: TIVOLI S. FAAUMU
Chief of Police

Enclosure

TO	:	**TIVOLI FAAUMU, CHIEF OF POLICE, COUNTY OF MAUI**
VIA	:	**CHANNELS** – NOTED. CONCUR W/ ASSESSMENT. RESPONSE LETTER WILL BE DRAFTED AND SENT TO BAGOYO DEVELOPMENT CONSULTING GROUP. John Jakubczak Assistant Chief 10.19.17
FROM	:	**MICHAEL VAITUULALA, POLICE OFFICER III, COMMUNITY POLICING**
SUBJECT	:	**RESPONSE TO A REQUEST FOR COMMENTS REGARDING DRAFT ENVIRONMENTAL ASSESSMENT AND ANTICIPATED FINDINGS OF NO SIGNIFICANT IMPACT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT**

This communication is submitted as a response to a request for comments by Vince BAGOYO, Consultant, Bagoyo Development Group.

PROJECT	:	Proposed Wailuku Apartment Rental Housing Project TMK (2) 3-5-001:064
LOCATION	:	Corner of Waiale Road and Kui Kahi Road, Wailuku.
TMK NO.	:	TMK (2) 3-5-001:064

RESPONSE:

In review of the submitted documents, concerns from the police perspective are upon the safety of pedestrian and vehicular movement.

The proposed project is located at Waiale Road, Wailuku, Maui, Hawaii identified as TMK: (2) 3-5-001:064. The property

The Legacy Wailuku, LLC is proposing to develop 324 workforce apartment housing units on 14.4 acres of land located at Waiale Road, Wailuku, Maui. The project will consist of sixty percent (195 units) affordable apartment units to qualified individuals set forth by the affordable rent guidelines of the Hawaii Housing Finance and Development Corporation. The remaining forty percent (129 units) is proposed to be unrestricted and priced at market value.

The project site is located within the State Land Use Agricultural District, with this Section 201H-38, HRS application Legacy Wailuku, LLC is also requesting that the Maui County Council approve a State Land Use Boundary Amendment pursuant to Section 205-3.1, HRS and Section 19.68.040, Maui County Code to reclassify the 14.4 acres of the subject property for the proposed workforce apartment rental project from the State Agricultural District to the State land Use Urban District.

During the construction phase, extreme efforts should be made to minimize noise, dust, and debris so not to inhibit those whose health and well being may be affected. Adequate traffic control devices and personnel should also be utilized to minimize the impacts to pedestrian and vehicular movement by the heavy equipment and vehicles traveling in and out of the area.

It is the duty of the project manager to examine the impact of vehicular movement within the area while work is conducted on this project.

It is also important to consider proper and adequate lighting during evening, late night, and early morning hours during construction and after the project is completed. Congregation of the unlawful element, whether it is by status offense or by criminal offense tends to occur in poorly lit areas that are easily accessible and away from the general population.

CONCLUSION:

There are no objections to the proposed Wailuku Apartment Rental Housing Project, from the police standpoint, in regards to pedestrian and vehicular movement. However, consideration is requested for sufficient lighting to be installed for not only the safety of vehicular movement, but for crime prevention and deterrence as well.

Respectfully submitted,

Michael VAITUULALA E#13964
Police Officer III / Community Policing
10/13/17 at 0900 hrs.

AFFORDABLE HOUSING PROJECT IN WAILUKU MUCH NEEDED - RECOMMEND APPROVAL 10/17/17 @ 1115

Concur.
10/17/17

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Assistant Chief John Jakubczak
Police Department
55 Mahalani Street
Honolulu, Hawaii 96804

Dear Assistant Chief Jakubczak:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA that you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 19, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

During the construction phase, extreme efforts should be made to minimize noise, dust, and debris so not to inhibit those whose health and well being may be affected. Adequate traffic control devices and personnel should also be utilized to minimize the impacts to pedestrian and vehicular movement by the heavy equipment and vehicles traveling in and out of the area.

It is the duty of the project manager to examine the impact of vehicular movement within the area while work is conducted on this project.

It is also important to consider proper and adequate lighting during evening, late night, and early morning hours during construction and after the project is completed. Congregation of the unlawful element, whether it is by status offense or by criminal offense tends to occur in poorly lit areas that are easily accessible and away from the general population.

Response to comment:

The new EA will address construction-related impacts from noise, dust, debris and traffic; and as may be appropriate proposed mitigation measures. Also, should night time construction become necessary adequate lighting will be provided.

Comment:

There are no objections to the proposed Wailuku Apartment Rental Housing Project, from the police standpoint, in regards to pedestrian and vehicular movement. However, consideration is requested for

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

sufficient lighting to be installed for not only the safety of vehicular movement, but for crime prevention and deterrence as well.

Response to comment:

We acknowledge the Police Department has no objections regarding pedestrian and vehicular movements from the project. Also, the Applicant will review the lighting plan for the project to ensure there is sufficient lighting to promote pedestrian safety and to prevent crime within the project site.

Again, thank you for your comments. Your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at 808-357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

David Goode, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Goode:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

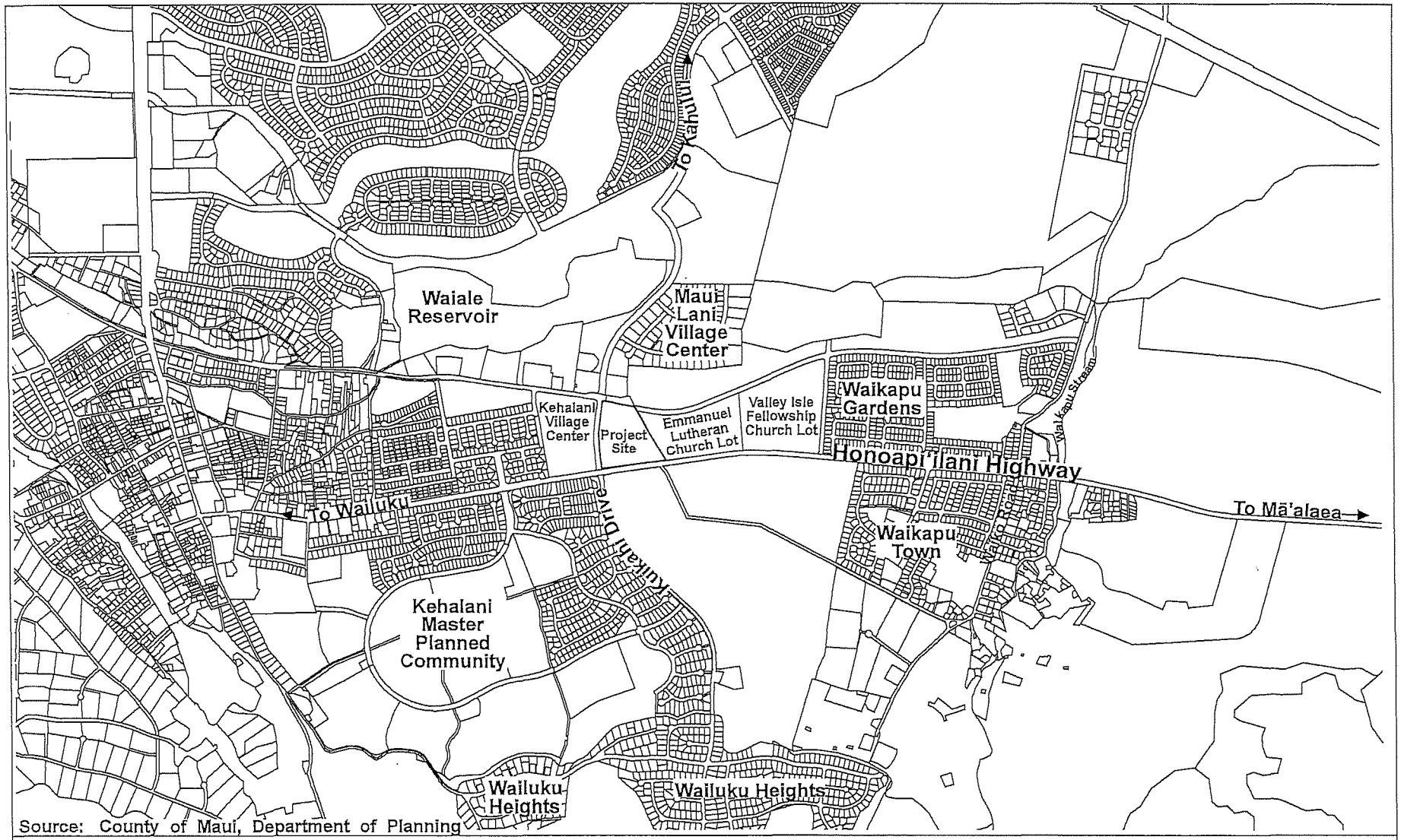


Figure 1

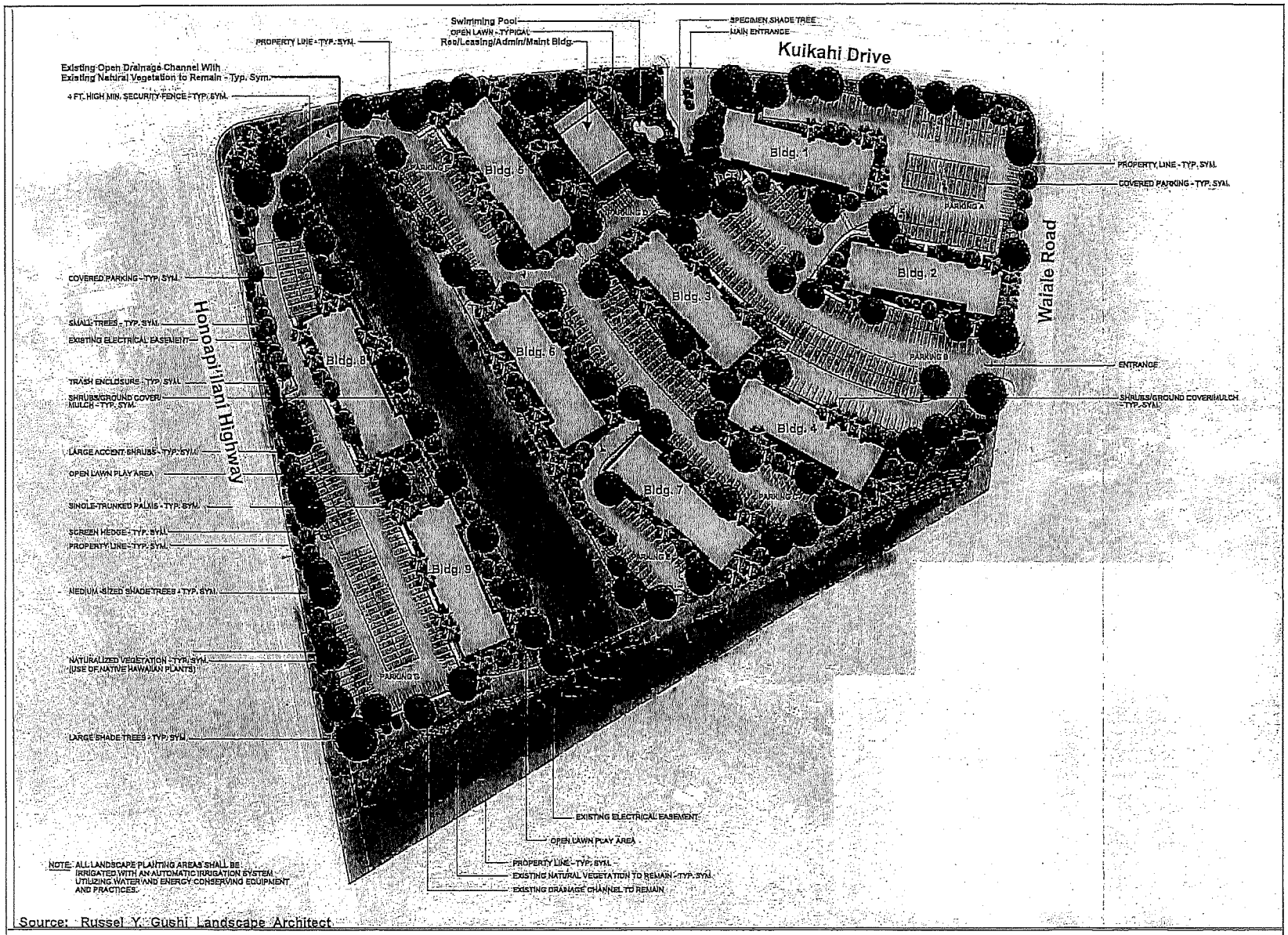
Wailuku Apartment Rental Housing Project
Regional Location Map

0 500 1,000 2,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

GLEN A. UENO, P.E., P.L.S.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

JOHN R. SMITH, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

November 9, 2017

Mr. Vince Bagoyo
BAGOYO DEVELOPMENT CONSULTING GROUP
1500 Kilinoe Place
Wailuku, Maui, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT AND ANTICIPATED FINDINGS OF NO SIGNIFICANT IMPACT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT TMK: (2) 3-5-001:064, WAIALE ROAD, WAILUKU, MAUI, HAWAII

We reviewed the subject application and have the following comments:

Comments from the Highways Division:

1. Page 81, Summary of Exemptions, No. 9 –Vertical concrete curb/gutter and sidewalks will provide a safer, longer term walkable environment to nearby local establishments. We do not recommend the requested exemption for asphalt curb and sidewalk, and grassed swale along Waiale Drive, and no sidewalk along Kuikahi Drive (Figure 2-2). Onsite sidewalk plan does not appear to provide residents a directed route avoiding Kuikahi Drive shoulder (page 97). Drainage improvements along Kuikahi Drive and Waiale Road frontages should be considered similar to the improvements currently being constructed across the street along Kuikahi Drive.

2. Page 82, Summary of Exemptions, No. 11 – Street lighting will provide a safer walkable environment to nearby local establishments. We do not recommend the requested exemptions from street lighting.

3. Page 84, Summary of Exemptions, No. 12 – Non-conformance with the County's Municipal Separate Storm Sewer System (MS4) guidelines may

put the County at risk of non-compliance. We do not recommend the requested exemption to push compliance onto downstream facilities.

4. Page 86, Summary of Exemptions, No. 17 – See comments on exemption No. 9 above.

Comments from the Engineering Division:

1. Page 78, Summary of Exemptions, No. 3 - The Department is unsure of the exemption being requested from Title 12, Maui County Code: Street, Sidewalks, and Public Places. Please identify the specific section in this title that the applicant is requesting an exemption from.

2. Page 78, Summary of Exemptions, No. 3 - Provide a breakdown of the estimated $1,075,010 value on offsite bike and pedestrian connectivity.

3. Page 78, Summary of Exemptions, No. 3 - The rationale for Exemption B.3 also notes a ". . . bike lane for pedestrians . . .", this needs to be revised for clarity.

4. Page 78, Summary of Exemptions, No. 3 - The project entry is located directly across the Kehalani Village Center which creates an opportunity for connectivity between the two areas. Limiting pedestrian crossings to the signalized intersections at Kuikahi Drive and Honoapiilani Highway and Kuikahi Drive and Waiale Road is unrealistic and potentially creates an unsafe situation for pedestrians wanting to cross the road at the project's entry location. The Department requests that the applicant consider solutions for a pedestrian crossing with appropriate safety improvements and that this crossing be installed to the satisfaction of the Department of Public Works.

5. Page 81, Summary of Exemptions, No. 9 – The applicant requests an exemption to Title 16, Maui County Code, Buildings and Construction, Section 16.26B.3600-Chapter 36: Improvements to Public Streets and states the following as rationale:

> "Exempt the development from having to construct pavements, curbs, and sidewalks along Kuikahi Drive, Waiale Road, and Honoapiilani Highway when doing so will offer little or no benefit to project residents but whose cost will add significantly to their rents."

Consider the transportation needs of residents who do not have access to a car. Is it implied that ***all*** of your residents will have a car? For families without a car, walking, biking, or public transportation may be their only options for mobility.

Children living in the area may attend Pu'u Kukui Elementary School, Iao Intermediate School or St. Anthony School. Bus service may not be an option for these children, so walking to school may be the only transportation option made available to them.

Sidewalks and bike lanes are Complete Street elements that improve mobility, provide additional safety, and promote geographic equity for residents. These elements are important community assets in this urbanized location, especially for children, seniors, and individuals with disabilities. As such, the Department strongly objects to the requested exemption.

6. The Traffic Impact Analysis report (TIAR) states that no bike improvement is identified along Waiale Road in the Hawaii Department of Transportation (HDOT) Bike Plan Hawaii. This should not be taken to mean that bicycle-related improvements do not need to be included with the project. Due to the affordable component of this project, improvements for non-motorized means of transportation such as bicycles should be provided.

7. Exemptions to pedestrian- and bicycle-related improvements are contrary to the County of Maui's efforts toward Smart Growth and the use of Complete Streets design methods.

8. Cost for exemption B.9. is included in cost presented for B.3. Provide a breakdown as curbs, gutters, and some pavement widening may need to be treated separate from B.3. (Offsite Pedestrian and Bike Connectivity) to present a better cost of the improvements.

9. TIAR provides a brief discussion on Transportation Demand Management (TDM) programs, however, project does not identify improvements for safely getting future residents to those services.

10. TIAR lists with project recommendations. The project narrative should clearly state which entity is responsible for the improvements.

11. Provide recommendations to improve traffic circulation within the TIAR study area. Report identifies existing concerns within the TIAR study area and the proposed project adds to the existing concerns. Provide an overview of recommendations that may improve traffic circulation within the TIAR study area.

12. TIAR recommends optimizing the Waiale Road/Kuikahi Drive intersection signal. Optimization should be done over a period of time. TIAR should propose a schedule to provide the optimized phasing and timing.

13. TIAR recommends providing a left turn with a minimum storage length of "at least 50 feet or as long as feasibly possible . . . ." What is actually required to serve the development, and what are the effects if the project does not provide the required length? Discussion on alternative project access points and configuration should be provided.

14. TIAR recommends providing a new northbound left turn lane with a minimum of at least 50 feet. Please confirm that 50 feet is the length required.

15. TIAR recommends restriping the southbound leg of the Kuikahi Drive Project Access. How does this impact overall intersection operations and who will implement this?

16. TIAR Figure 1.1 - Include study of Waiale Road/Kaupo Street, Waiale Road/Olomea Street, and Waiale Road/Kaohu Street intersections, or provide justification for not including them.

17. TIAR pg. 18, 25, 32-34 - Provide justification and calculations showing Level of Service (LOS) E/F during the AM and PM Peak Hours for the roundabout at Maui Lani Parkway/Kamehameha Avenue. The Department's most recent analysis of this intersection shows a single-lane roundabout operating at a LOS C (worst approach) in 2036 with similar volumes.

18. The Engineering Division recommends that the applicant schedule a meeting with the Department to discuss the Division's concerns with the proposed exemptions and proposed traffic mitigation.

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:da
xc: Highways Division
Engineering Division
S:\DSA\Engr\CZM\Draft Comments\35001064_wailuku_apt_rental_housing_dea.rtf

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

David C. Goode
Director of Public Works
County of Maui
200 South High Street, Room No. 434
Wailuku, Maui 96793

Dear Director Goode:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated November 9, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

General Comments No. 1 through 4:

1. *Page 81, Summary of Exemptions, No. 9 – Vertical concrete curb/gutter and sidewalks will provide a safer, longer term walkable environment to nearby local establishments. We do not recommend the requested exemption for asphalt curb and sidewalk, and grassed swale along Waiale Drive, and no sidewalk along Kuikahi Drive (Figure 2-2). Onsite sidewalk plan does not appear to provide residents a directed route avoiding Kuikahi Drive shoulder (page 97). Drainage improvements along Kuikahi Drive and Waiale Road frontages should be considered similar to the improvements currently being constructed across the street along Kuikahi Drive.*

2. *Page 82, Summary of Exemptions, No. 11 – Street lighting will provide a safer walkable environment to nearby local establishments. We do not recommend the requested exemptions from street lighting.*

3. *Page 84, Summary of Exemptions, No. 12 – Non-conformance with the County's Municipal Separate Storm Sewer System (MS4) guidelines may put the County at risk of non-compliance. We do not recommend the requested exemption to push compliance onto downstream facilities.*

4. *Page 86, Summary of Exemptions, No. 17 – See comments on exemption No. 9 above.*

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Response to comments:

The Applicant proposes to continue further discussions with your department regarding these requirements.

ENGINEERING DIVISION

Comment No. 1:

1. *Page 78, Summary of Exemptions, No. 3 – The Department is unsure of the exemption being requested from Title 12, Maui County Code: Street, Sidewalks, and Public Places. Please identify the specific section in this title that the applicant is requesting an exemption from.*

Response to comment No. 1:

Reference to MCC Title 12 was included in error and will be deleted from the request for exemptions

Comment No. 2:

2. *Page 78, Summary of Exemptions, No. 3 – Provide a breakdown of the estimated $1,075,010 value on offsite bike and pedestrian connectivity.*

Response to comment No. 2:

A breakdown of this estimate is in Attachment A to this letter.

Comment No. 3:

3. *Page 78, Summary of Exemptions, No. 3 – The rationale for Exemption B.3 also notes a "...bike lane for pedestrians...", this needs to be revised for clarity.*

Response to comment:

We will include further clarification in the new EA.

Comment No. 4:

4. *Page 78, Summary of Exemptions, No. 3 - The project entry is located directly across the Kehalani Village Center which creates an opportunity for connectivity between the two areas. Limiting pedestrian crossings to the signalized intersections at Kuikahi Drive and Honoapiilani Highway and Kuikahi Drive and Waiale Road is unrealistic and potentially creates an unsafe situation for pedestrians wanting to cross the road at the project's entry location. The Department requests that the applicant consider solutions for a*

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pedestrian crossing with appropriate safety improvements and that this crossing be installed to the satisfaction of the Department of Public Works.

Response to comment No. 4:

The applicant will continue discussions with your department to seek solutions that will provide safe pedestrian access between the project and Kehalani Village Center on Kuikahi Drive.

Comment No. 5:

5. *Page 81, Summary of Exemptions, No. 9 - The applicant requests an exemption to Title 16, Maui County Code, Buildings and Construction, Section 16.26B.3600-Chapter 36: Improvements to Public Streets and states the following as rationale:*

"Exempt the development from having to construct pavement, curbs, and sidewalks along Kuikahi Drive, Waiale Road, and Honopiilani Highway when doing so will offer little or no benefit to project residents but whose cost will add significantly to their rents."

*Consider the transportation needs of residents who do not have access to a car. Is it implied that **all** of your residents will have a car? For families without a car, walking, biking, or public transportation may be their only options for mobility.*

Children living in the area may attend Pu'u Kukui Elementary School, Iao Intermediate School or St. Anthony School. Bus service may not be an option for these children, so walking to school may be the only transportation option made available to them.

Sidewalks and bike lanes are Complete Street elements that improve mobility, provide additional safety, and promote geographic equity for residents. These elements are important community assets in this urbanized location, especially for children, seniors, and individuals with disabilities. As such, the Department strongly objects to the requested exemption.

Response to comment No. 5:

Although an exemption is being requested for a portion of the project's frontages, a six (6) ft. wide sidewalk will be provided along Waiale Road to the entrance of the project. As noted previously, the applicant will continue its discussions with your department to seek a solution to providing safe pedestrian access to the north side of Kuikahi Street from the north driveway entrance so pedestrians from the project can utilize the sidewalk system on the north side of Kuikahi Drive to access Pu'u Kukui School, as well as shopping opportunities at the Kehalani Village Center. Although there is no sidewalks proposed for the Kuikahi frontage the grassed shoulder area outside of the roadway pavement is wide enough for pedestrians to walk along Kuikahi Drive.

Bike lanes are being provided along the Kuikahi Drive and Waiale Road frontages.

Comment No. 6:

6. *The Traffic Impact Analysis report (TIAR) states that no bike improvement is identified along Waiale Road in the Hawaii Department of Transportation (HDOT) Bike Plan Hawaii. This should not be taken to mean that bicycle-related improvements do not need to be included with the project. Due to the affordable component of this project, improvements for non-motorized means of transportation such as bicycles should be provided.*

Response to comment No. 6:

We acknowledge your comments on bike-related improvements. As noted previously, bike lanes are being proposed along Kuikahi Drive and Waiale Road.

Comment No. 7:

7. *Exemptions to pedestrian- and bicycle-related improvements are contrary to the County of Maui's efforts toward Smart Growth and the use of Complete Streets design methods.*

Response to comment:

As noted previously, we will continue discussions with your department regarding pedestrian and bicycle improvements. Bike lanes will be provided along both Wailuku Apartment Rental Housing project's Kuikahi Drive and Waiale Road frontages. The Applicant will also investigate solutions in providing safe pedestrian access to and from the Wailuku Apartment Rental Housing project.

Comment No. 8

8. *Cost for exemption B.9. is included in cost presented for B.3. Provide a breakdown as curbs, gutter, and some pavement widening may need to be treated separate from B.3. (Offsite Pedestrian and Bike Connectivity to present a better cost of the improvements.*

Response to comment:

The Applicant will provide your department with a revised cost breakdown of the proposed exemptions being sought.

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WAILUKU APARTMENTS
Estimated Value of Exemption No. 3:
Offsite Bike and Pedestrian Connectivity Improvements
November 14, 2017

Description	Approx. Quantity	Unit	Unit Price	Total
Kuikahi Drive				
6 ft. wide Conc. Sidewalk	960	l.f.	$ 66	$ 63,360
Conc. Wheelchair Ramp	2	ea.	$ 5,000	$ 10,000
			Subtotal - Kuikahi Drive:	$ 73,360
Waiale Road				
6 ft. wide Conc. Sidewalk	550	l.f.	$ 66	$ 36,300
Conc. Wheelchair Ramp	1	ea.	$ 5,000	$ 5,000
			Subtotal - Waiale Road:	$ 41,300
			TOTAL - Exemption No. 3:	**$ 114,660**

Comment NoS. 9 through 17:

9. *TIAR provides a brief discussion on Transportation Demand Management (TDM) programs, however, project does not identify improvements for safely getting future residents to those services*
10. *TIAR lists with Project recommendations. The project narrative should clearly state which entity is responsible for the improvements.*
11. *Provide recommendations to improve traffic circulation with the TIAR study area. Report identifies existing concerns within the TIAR study area and the proposed project adds to the existing concerns. Provide an overview of recommendations that may improve traffic circulation within the TIAR study area.*
12. *TIAR recommends optimizing the Waiale Road/Kuikahi Drive intersection signal. Optimization should be done over a period of time. TIAR should propose a schedule to provide the optimized phasing and timing.*
13. *TIAR recommends providing a left turn with a minimum storage length of "at least 50 feet or as long as feasibly possible...." What is actually required to serve the development, and what are the effects if the project does not provide the required length? Discussion on alternative project access points and configuration should be provided.*

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14. *TIAR recommends providing a new northbound left turn lane with a minimum of at least 50 feet. Please confirm that 50 feet is the length required.*
15. *TIAR recommends restriping the southbound leg of the Kuikahi Drive Project Access. How does this impact overall intersection operations and who will implement this?*
16. *TIAR Figure 1.1 - Include study of Waiale Road/Kaupo Street, Waiale Road/Olomea Street, and Waiale Road/Kahohu Street intersections, or provide justification for not including them.TIAR pg. 18, 25, 32-34 - Provide justification and calculations showing the Level of Service (LOS) E/F during the AM and PM Peak Hours for the roundabout at Maui Lani Parkway/Kamehameha Avenue. The Department's most recent analysis of this intersection shows a single-lane roundabout operating at a LOS C (worst approach) in 2036 with similar volumes.*

Response to comment:
Your comments have been forwarded to the traffic engineer and will be addressed in a revised TIAR to be included in the new EA to be prepared.

Again, thank you for your comments. Your letter and this response letter will be included in the new EA to be prepared. If additional clarification is require, please contact me at (808) 357-3842.
Sincerely,

V. Bagoyo Development Consulting Group, LLC

Attachment A

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Attachment A

WAILUKU APARTMENTS

Estimated Value of Select 201H Exemptions

Construction Cost Breakdown

August 2, 2017

Description	Approx. Quantity	Unit	Unit Price	Total
Exemption: Offsite Bike and Pedestrian Connectivity and				
Exemption: Offsite Public Street Frontage Improvements: Curbs, Sidewalks and Lane Widening				
Honoapiilani Highway				
Additional Grubbing	0.4	Ac.	$ 8,000	$ 3,200
Embankment/Fill	700	c.y.	$ 20	$ 14,000
Concrete Curb and Gutter	900	l.f.	$ 45	$ 40,500
6 ft. wide Conc. Sidewalk	900	l.f.	$ 66	$ 59,400
AC Pavement Widening (4" AC Mix IV; 8" UTB; 12" Subbase)	3,500	s.f.	$ 30	$ 105,000
Metal Guardrail	900	l.f.	$ 65	$ 58,500
24" Drainline	680	l.f.	$ 145	$ 98,600
Curb Inlet Catch Basin	2	ea.	$ 13,000	$ 26,000
Storm Drain Manhole	2	ea.	$ 10,000	$ 20,000
Tie-in to Ext'g Conspan Drainage Structure	1	ea.	$ 20,000	$ 20,000
Pavement Markings		L.S		$ 5,000
			Subtotal - Honoapiilani Highway:	$ 450,200
Kuikahi Drive				
Embankment/Fill	1,700	c.y.	$ 20	$ 34,000
Concrete Curb and Gutter	960	l.f.	$ 45	$ 43,200
6 ft. wide Conc. Sidewalk	960	l.f.	$ 66	$ 63,360
Conc. Wheelchair Ramp	2	Ea.	$ 5,000	$ 10,000
Signal Post Relocation	2	Ea.	$ 8,000	$ 16,000

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AC Pavement Widening (2.5" AC Mix IV; 5" ATB; 8" Subbase)	9,500	s.f.	$	20	$	190,000
Metal Guardrail	500	l.f.	$	65	$	32,500
24" Drainline	400	l.f.	$	145	$	58,000
Curb Inlet Catch Basin	2	ea.	$	13,000	$	26,000
Storm Drain Manhole	2	ea.	$	10,000	$	20,000
Pavement Markings		L.S			$	5,000
				Subtotal - Kuikahi Drive:	$	498,060
Waiale Road						
Embankment/Fill	100	c.y.	$	12	$	1,200
Concrete Curb and Gutter	550	l.f.	$	45	$	24,750
6 ft. wide Conc. Sidewalk	550	l.f.	$	66	$	36,300
Conc. Wheelchair Ramp	1	ea.	$	5,000	$	5,000
AC Pavement Widening (2.5" AC Mix IV; 5" ATB; 8" Subbase)	1,100	s.f.	$	20	$	22,000
24" Drainline	100	l.f.	$	145	$	14,500
Curb Inlet Catch Basin	1	ea.	$	13,000	$	13,000
Storm Drain Manhole	1	ea.	$	10,000	$	10,000
				Subtotal - Waiale Road:	$	126,750
				Subtotal - Exemptions	$	1,075,010

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Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Don Medeiros, Director
County of Maui
Department of Transportation
David Trask Building, Suite 102
2145 Kaohu Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Medeiros:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

Maui: 305 High Street, Suite 104 • Wailuku, Hawaii 96793 • Tel: 808.244.2015 • Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 • Honolulu, Hawaii 96813 • Tel: 808.983.1233
www.munekiyohiraga.com

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

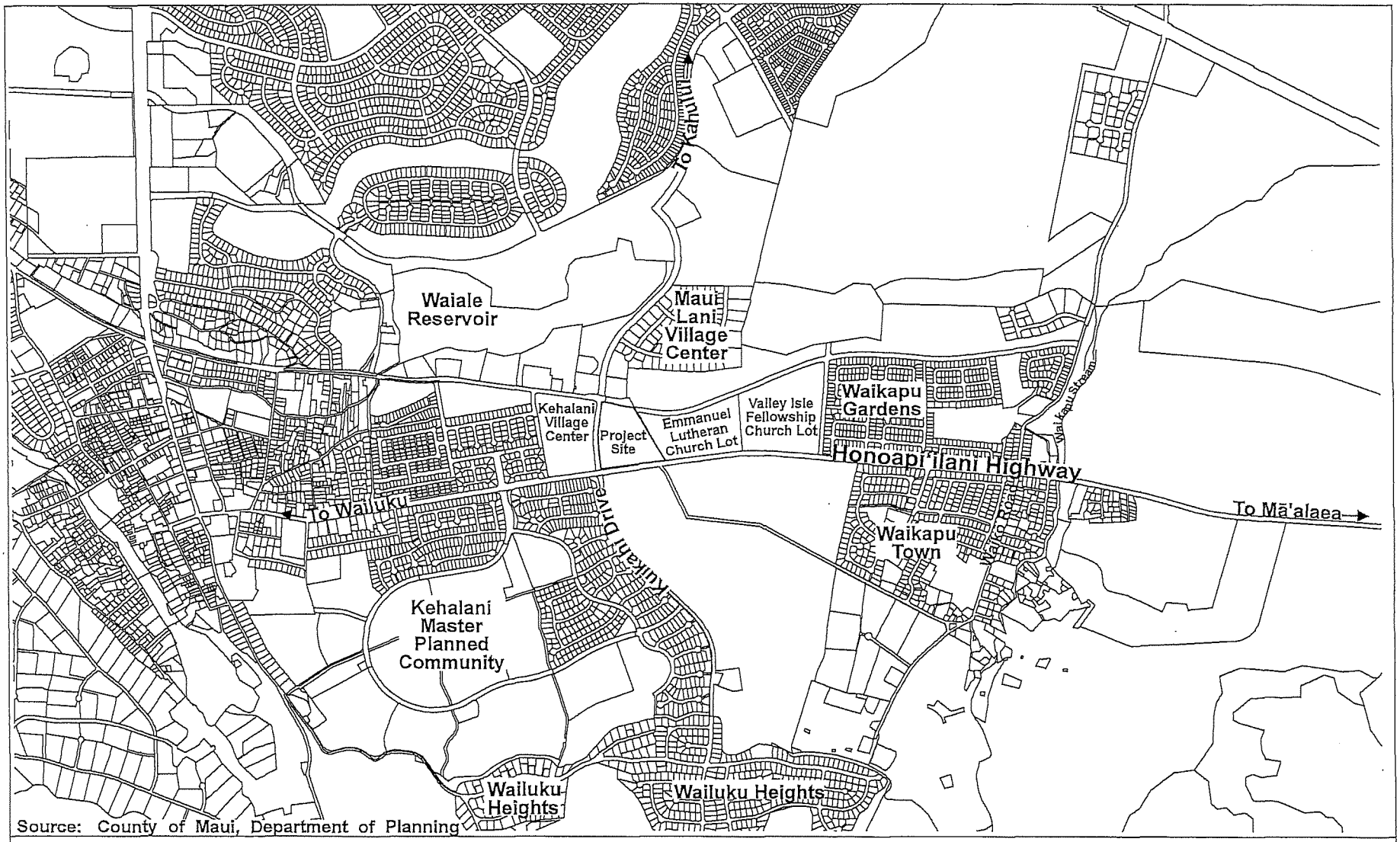


Figure 1

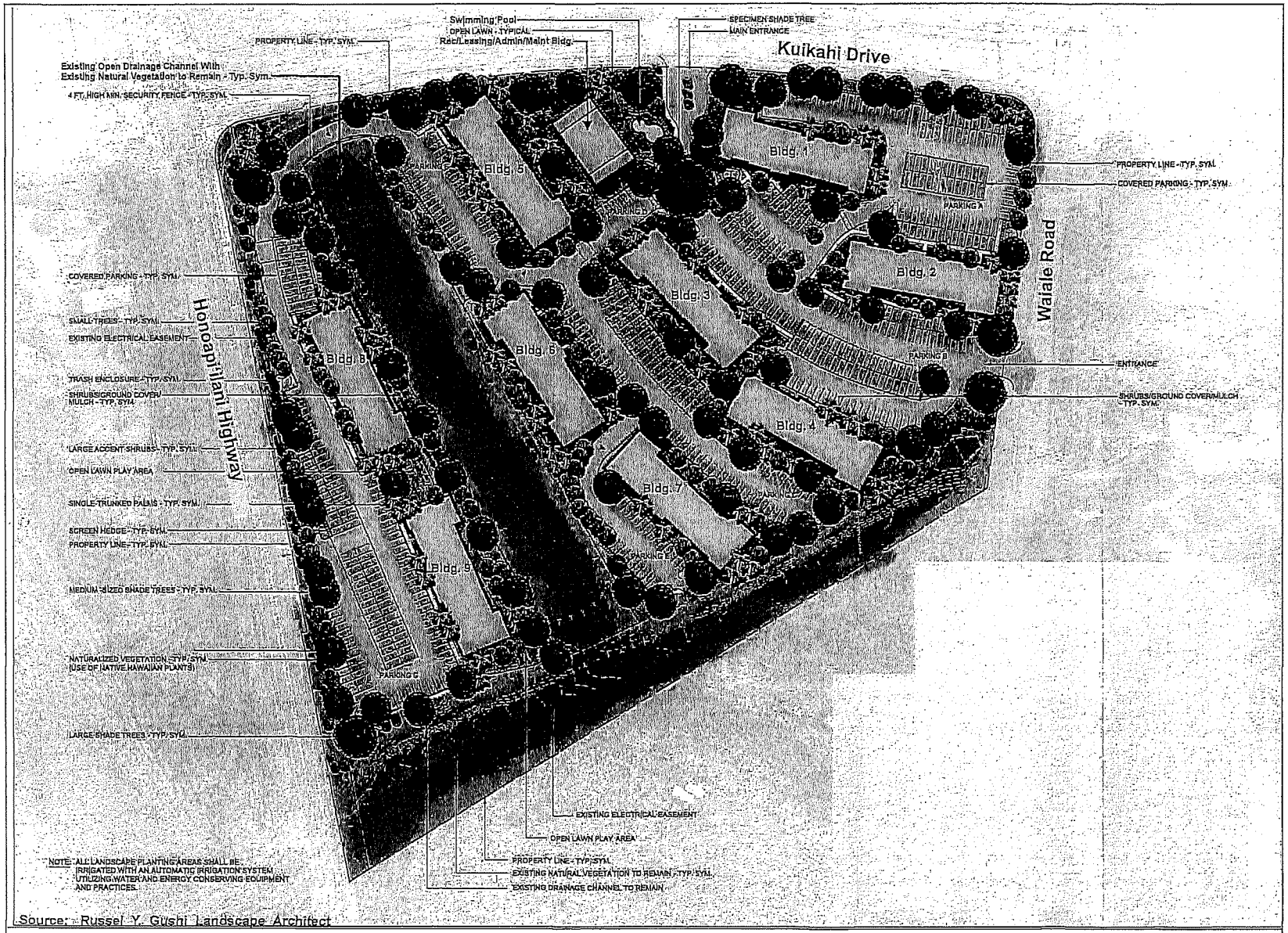
Wailuku Apartment Rental Housing Project
Regional Location Map

0 500 1,000 2,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

ALAN M. ARAKAWA
Mayor

DON MEDEIROS
Director

MARC I. TAKAMORI
Deputy Director

(808) 270-7511

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
2145 Kaohu Street, Suite 102
Wailuku, Hawaii, USA 96793

October 18, 2017

Mr. Vince Bagoyo
1500 Kilinoe Place
Wailuku, HI 96793

Subject: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements

Dear Mr. Bagoyo,

We appreciate the opportunity to provide comments on your Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements.

Three bus routes operate within the vicinity of the proposed project on Waiale Rd in Wailuku, HI. The first two routes are the Wailuku Loop Route #1 and the Wailuku Loop Reverse Route #2. Both of these routes start and end at Queen Ka'ahumanu Center and circulate within Wailuku. The two stops nearest to this project are at Ka Hale A Ke Ola on Waiale Road and the other is on Kamole Street in the Kehalani Subdivision. The third route is the Lahaina Islander Route #20, which travels between Central Maui and Lahaina Town hourly. It does not stop near the development, but does pass the area as it travels along Honoapi'ilani Highway. Transit was referenced within the application, but we wanted to share a little more detailed description of transit options near the proposed project.

While a bus stop isn't currently provided right next to the proposed project, providing interconnecting sidewalk and ample lighting in the evening is necessary for walkable communities and for the safety of potential public transit riders.

Please feel free to contact me if you have any questions.

Sincerely,

Don Medeiros
Director

S:\Letters\DOT Response - Wailuku Apartment Rental Housing Project.doc

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

January 24, 2018

Don Medeiros
Director of Department of Transportation
County of Maui
2145 Kaohu Street, Suite 102
Wailuku, Maui 96793

Dear Director Medeiros:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 18, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:
While a bus stop isn't currently provided right next to the proposed project, providing interconnecting sidewalk and ample lighting in the evening is necessary for walkable communities and for the safety of potential public transit riders.

Response to comment:
The Applicant will discuss with your agency measures to provide safe pedestrian access to the County's public transit system.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc



Figure 1

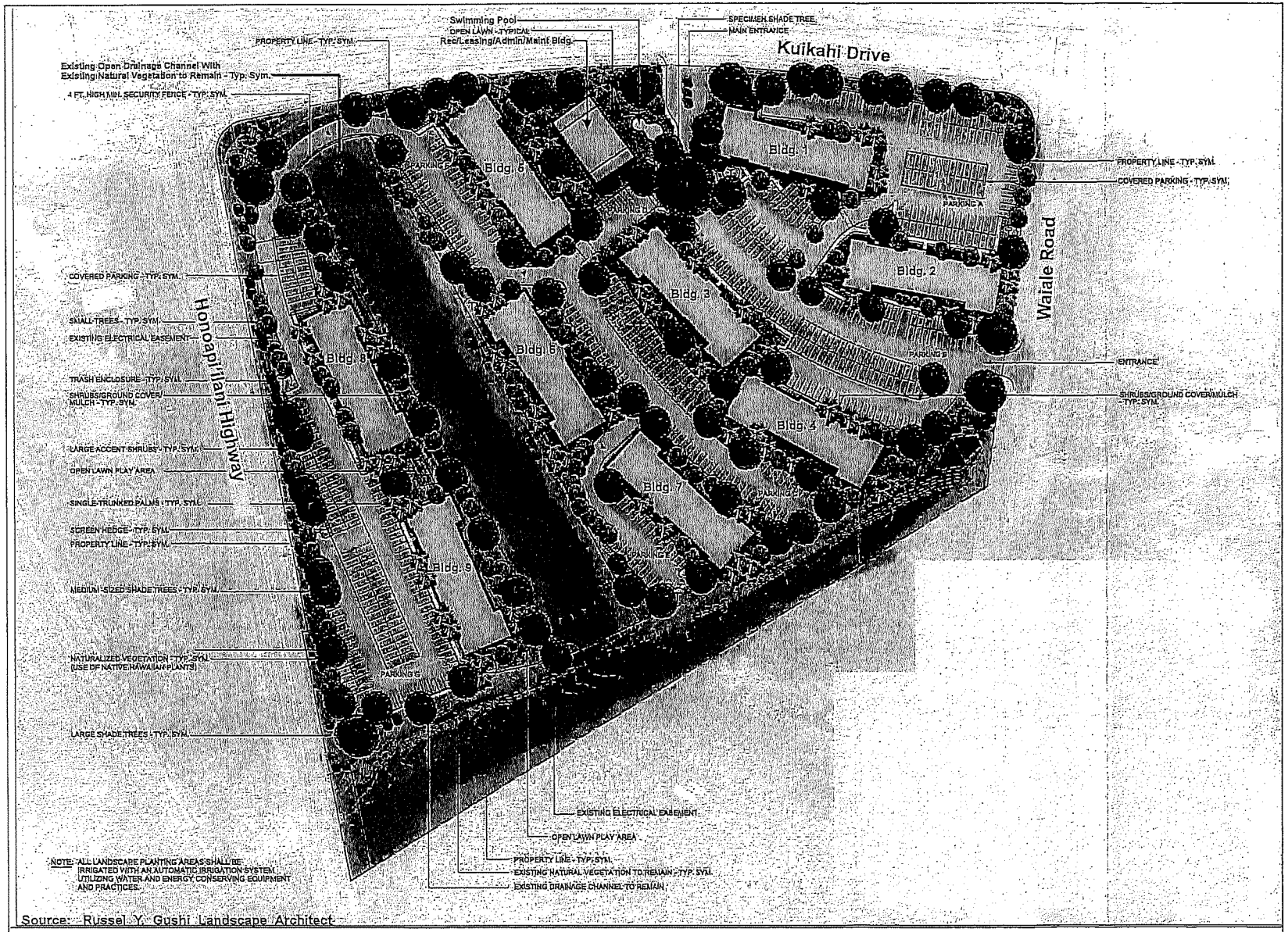
Wailuku Apartment Rental Housing Project
Regional Location Map

1,000 Feet
0 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku\Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

ALAN M. ARAKAWA
Mayor

DAVID TAYLOR, P.E.
Director

GLADYS C.BAISA
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

October 23, 2017

Mr. Vince Bagoyo, Project Consultant
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Re: Draft Environmental Assessment (DEA) for the Proposed Wailuku Apartment Rental Housing Project, Waiale Road, Wailuku
TMK: (2) 3-5-001:064

Dear Mr. Bagoyo,

Thank you for the opportunity to comment on the DEA for the proposed Wailuku Apartment Rental Housing Project.

Source Availability, System Infrastructure and Consumption
The project area is served by the Central system and overlies the Iao aquifer, with a sustainable yield of 20 million gallons per day (gpd) according to the Commission on Water Resource Management.
The Department of Water Supply (DWS) maintains an 8-inch water line that runs parallel to Kuikahi Drive as well as an 18-inch water transmission line adjacent to the east property line. The nearest fire hydrant is within 150' of the site, at the corner of Waiale Road and Kuikahi Drive. There is no DWS meter on the parcel, which is subject to the County's Availability Policy, as codified in Title 14 of the Maui County Code. System requirements will be determined in the subdivision process. Please consult with DWS Engineer Tammy Yeh at 808-270-7835 for further information.
The document states that the projected water demand is 188,940 gpd, which is consistent with the guidelines set in Hawaii Water System Standards, 2002.

Aquifer Protection and Best Management Practices (BMPs)
We are pleased to note that the landscape plan includes installing native plant species, which help to conserve water and protect the Iao aquifer from further degradation. We recommend that the plants be watered using a dripline (in lieu of spray) irrigation system with rain sensors, and that all irrigation be scheduled between 7 PM and 7 AM, no more than twice weekly once plants are established.
The density of the project includes a large percentage of lot coverage with impermeable surfaces, which, with the exception of the drainage basin, limits the aquifer recharge. The entirety of the proposed project lies within the DWS two year time of travel wellhead protection (WHP) area. The WHP areas are delineated into two zones, the ten and two (closer to the well) year time of travel zones. Because the project lies within the two year time of travel zone, in an area that is more sensitive to pollutants that could enter the Iao aquifer and migrate to the well intake location, BMPs should be thoroughly implemented.

We recommend including parking with permeable surfaces, reducing runoff and improving aquifer recharge. The attached as well as the following BMPs designed to prevent contamination and protect groundwater should be noted in the EA and implemented:

1. Sweep parking lots and other paved areas periodically to remove debris. Dispose of debris in the garbage.
2. Post signs to control litter and prevent auto maintenance activities such as changing fluids or washing cars, which should not be allowed on the property.
3. Wash water from all cleaning operations must be discharged to the sanitary sewer.
4. Keep dumpster areas free of litter and lids closed.
5. Avoid mixing or using pesticides, fertilizers, herbicides, degreasers, fuels, or other pollutants onsite.

Should you have any questions, please call Staff Planner Audrey Dack at (808) 463-3109 or email audrey.dack@co.maui.hi.us.

Sincerely,

David Taylor, P.E. Director

mlb
cc: DWS Engineering Division

Best Management Practices (BMPs)

Construction BMPs

- Prevent cement products, oil, fuel and other toxic substances from falling onto the ground as they can leach into the water table. Remove all construction debris and toxic substances daily.
- Maintain vehicles and equipment to prevent oil or other fluids from leaking. Concrete trucks and tools used for construction should be rinsed off-site.
- Properly install and maintain erosion control barriers such as silt fencing or straw bales.
- Disturb the smallest area possible.
- Keep runoff on site.
- Use reclaimed water as an alternative source of non-potable water for dust control during construction. Kahului Wastewater Treatment Plant provides reclaimed water at a reasonable cost.
- Properly and promptly dispose of all loosened and excavated soil and debris material.

Conservation BMPs – Indoor

- Use EPA WaterSense labeled plumbing fixtures.
- Install flow reducers and faucet aerators in all plumbing fixtures wherever possible.
- Install dual flush toilets with high efficiency models that use 1.28 gallons per flush or less.
- Install showerheads with a flow rate of 1.5 gallons per minute (gpm) at 60 pounds per square inch (psi).
- Install bathroom sink fixtures that do not exceed 1 gpm at 60 psi.
- Laundry facilities should use Energy Star labeled washers.

Conservation BMPs – Outdoor

- Retain groundcover until the last possible date. Stabilize denuded areas by sodding or planting as soon as possible. Use high seeding rates to ensure rapid stand establishment.
- Limit turf to as small an area as possible.
- After plants are established, avoid fertilizing to stimulate growth.
- Use Smart Approved WaterMark irrigation products. Examples include evapotranspiration irrigation controllers and drip irrigation.

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

David Taylor
Project Engineer Director
Department of Water Supply
Engineering Division
200 South High Street
Wailuku, Maui, Hawaii 96793-2155

Dear Mr. Taylor:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA, which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 23, 2017. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

The project area area is served by the Central system and overlies the Iao aquifer, with a sustainable yield of 20 million gallons per day (gpd) according to the Commission on Water Resource Management. The Department of Water Supply (DWS) maintains an 8-inch water line that runs parallel to Kuikahi Drive as well as an 18-inch water transmission line adjacent to the east property line. The nearest fire hydrant is within 150' of the site, at the corner of Waiale Road and Kuikahi Drive. There is no DWS meter on the parcel, which is subject to the County's Availability Policy, as codified in Title 14 of the Maui County Code. System requirements will be determined in the subdivision process. Please consult with DWS Engineer Tammy Yeh at 808-270-7835 for further information.
The document states that the projected water demand is 188,940 gpd, which is consistent with the guidelines set in Hawaii Water System Standards, 2002.

Response to comment:

We acknowledge that the project is served by the Central system and overlies the Iao aquifer and the existing transmission system in the vicinity of the subject property. Also, we acknowledge your confirmation that the projected water demand is consistent with the guidelines set in the Hawaii Water System Standards, 2002.

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Comment:

We recommend that plants be watered using a dripline (in lieu of spray) irrigation system with rain sensors, and that all irrigation be scheduled between 7 PM and 7 AM, no more than twice weekly once plants are established.

Response to comment:

Your recommendation has been forwarded to the landscape architect for the project.

Comment:

The density of the project includes a large percentage of lot coverage with impermeable surfaces, which, with the exception of the drainage basin, limits the aquifer recharge....We recommend including parking with permeable surfaces, reducing runoff and improving aquifer recharge.

Response to comment:

The feasibility of utilizing parking with permeable surfaces will be evaluated.

Comment:

The entirety of the proposed project lies within the DWS two year time of travel wellhead protection (WHP) area. The WHP areas are delineated into two zones, the ten and two (closer to the well) year time of travel zones. Because the project lies within the two year time of travel

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

zone, in an area that is more sensitive to pollutants that could enter the Iao aquifer and migrate to the well intake location, BMPs should be thoroughly implemented.

Response to comment:

We acknowledge the need to both protect and conserve our groundwater water resources. The applicant will review the resource protection, construction and conservation BMPs recommended by the Dept. of Water Supply, and implement the applicable BMPs.

Again, thank you for your comments. Your comments and this response letter will be included in the new EA. If additional clarification is required, please contact met at 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Albert Perez, Executive Director
Maui Tomorrow
55 North Chuch Street, Suite A4
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Perez:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

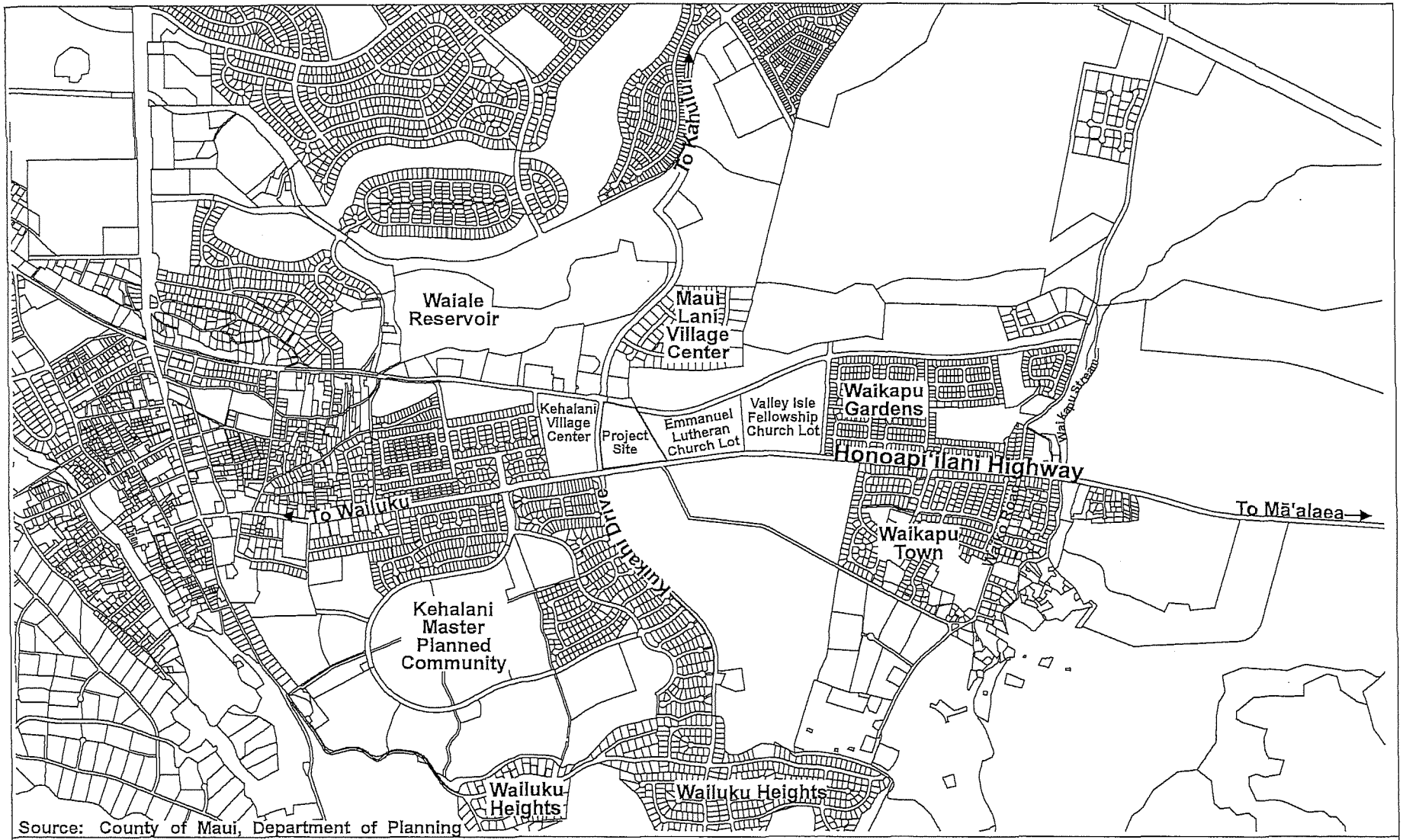


Figure 1

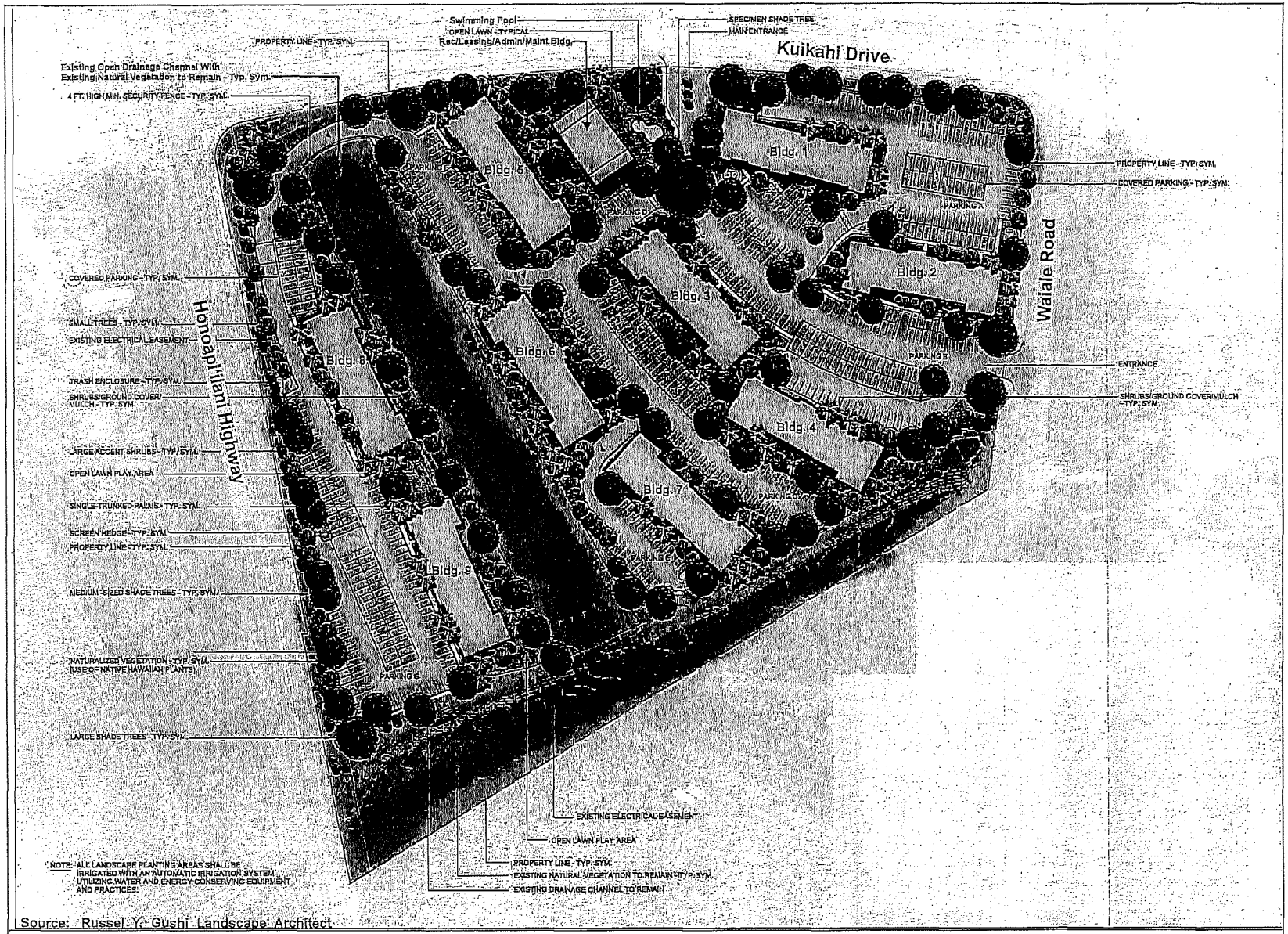
Wailuku Apartment Rental Housing Project
Regional Location Map

0 500 1,000 2,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\WailukuAfford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

From: Maui Tomorrow Foundation, Inc.
55 N. Church St, Suite A-4
Wailuku, HI 96793

To: Ken Takahashi
Hawaii Housing Finance and Development Corporation (HHFDC)
677 Queen Street, Room 300, Honolulu, HI 96813
ken.t.takahashi@hawaii.gov

Vince V. Bagoyo Development Consulting Group, LLC
1500 Kilinoe Pl., Wailuku, HI 96793
vbagoyo-devgroup@hawaii.rr.com

Date: October 23, 2017

RE: Wailuku Apartment Rental Housing Project DEA (AFNSI)

Maui Tomorrow Foundation supports the building of housing that is truly affordable for local residents in appropriate areas, with adequate infrastructure and planning to maintain Maui's quality of life. Unfortunately, the proposed project is not well planned, and requests a huge number of exemptions that give rise to unmitigated impacts that meet the definition of "significance" under HAR 11-200-12. The subject DEA does not fully evaluate the potential impacts of the proposed project on the natural and human environment, or provide adequate mitigative measures that will address and respond to all potential impacts on the natural and human environment. Therefore, we conclude that the DEA does not provide adequate information to meet the standards required in HAR 11-200-10. This project should not be granted a FONSI, and a full EIS should be required. Our specific comments follow.

1. The Applicant, in coordination with HHFDC, will seek numerous exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes. These authorities exist, in part, to prevent impacts on our environment. Exemption from these authorities will have specific and cumulative impacts that trigger the significance criteria listed in HAR 11-200-12 (b) 4, 5, 6, 7, 8, 10 and 13. These impacts must either be mitigated or evaluated in an EIS; issuance of a FONSI based on the current DEA would clearly be erroneous.

2. The Traffic Impact Analysis Report avoids looking clearly at the cumulative traffic impacts from nearby projects that will soon be built, and which will greatly impact all the intersections described.

3. The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing. However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. In each case infrastructure in and around the project area (water, waste water, schools, etc.) will be "impacted". These impacts need to be evaluated and mitigated, or an EIS needs to be prepared.

4. Schools: There is a listing on Draft-EA (pages 36+37) of Central Maui schools, but no indication how close to capacity each of these schools already is and what the impact would be from the additional 324 housing units. Because there is no analysis of potential enrollments there is absolutely no basis for concluding that, "No further mitigative measures are expected to be required." (Page 37). On the contrary, there will be impacts that need to be considered. Students from further away will move to this area. These impacts need to be evaluated and mitigated, or an EIS needs to be prepared.

5. Play areas and Parks: The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will likely be many children in a project catering to young families who do not have the income to purchase a home. There will be many toddlers who will use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). Older children will need to get to other parks along streets that currently have inadequate sidewalks and by crossing several very busy and dangerous high traffic avenues. These impacts need to be evaluated and mitigated, or an EIS needs to be prepared.

6. Water: The Draft-EA (PDF Pages 44 + 45) and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gallons for fire flow. The impacts that this project will have on Central and South Maui developments that depend on the Central Maui water systems need to be evaluated and mitigated, or an EIS prepared.

Given the above, issuance of a FONSI based on the current DEA would not meet the standards set by HRS 343. A full EIS should be required.

Mahalo for the opportunity to comment.

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Albert Perez, Executive Director
Maui Tomorrow Foundation, Inc.
55 N. Church St., Suite A-4
Wailuku, HI 96793

Dear Mr. Perez:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA, which you have reviewed will be withdrawn and a new EA prepared by Munekiyo Hiraga. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 23, 2017 which was addressed to Mr. Ken Takahashi from the Hawaii Housing Finance Development Corporation (HHFDC) and myself.

Comment:

1. The Applicant, in coordination with HHFDC, will seek numerous exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes. These authorities exist, in part, to prevent impacts on our environment. Exemption from these authorities will have specific and cumulative impacts that trigger the significance criteria listed in HAR 11-200-12 (b) 4, 5, 6, 7, 8, 10 and 13. These impacts must either be mitigated or evaluated in an EIS; issuance of a FONSI based on the current DEA would clearly be erroneous.

Response to comment:
A new EA will be prepared for the proposed project pursuant to the requirements of Chapter 343, Hawaii Revised Statutes (HRS) and Title 200 Department of Health, Hawaii Administrative Rules (HAR). The new EA will include an analysis of the proposed exemptions and its impacts. The new EA will be evaluated by HHFDC as to its adequacy and HHFDC will make a determination whether an Environmental Impact Statement (EIS) will be required.

Comment:
2. The Traffic Impact Analysis Report avoids looking clearly at the cumulative traffic impacts from nearby projects that will soon be built, and which will greatly impact all the intersections described.

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Response to comment:

Your comments have been forwarded to the traffic engineer. The traffic reports prepared for A&B's Waiale project and the Waikapu Town Center will be reviewed and as may be appropriate the traffic report for the project will be revised.

Comment:

3. The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing. However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. In each case infrastructure in and around the project area (water, waste water, schools, etc.) will be "impacted". These impacts need to be evaluated and mitigated, or an EIS needs to be prepared.

Response to comment:

Your concerns regarding the adequacy of the evaluation on impacts on infrastructure, such as schools and other facilities, will be re-evaluated in the new EA and proposed mitigation, as may be appropriate, will be included in the new EA.

Comment:

4. Schools: There is a listing on Draft-EA (pages 36+37) of Central Maui schools, but no indication how close to capacity each of these schools already is and what the impact would be from the additional 324 housing units. Because there is no analysis of potential enrollments there is absolutely no basis for concluding that, "No further mitigative measures are expected to be required." (Page 37). On the contrary, there will be impacts that need to be considered. Students from further away will move to this area. These impacts need to be evaluated and mitigated, or an EIS needs to be prepared.

Response to comment:

The Department of Education (DOE) provided comments on the Draft EA, which will be included in the new EA to be prepared. Further, the DOE will be contacted to provide additional input on educational facilities within the project area. As advised by the DOE, the applicant will not be seeking any

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

exemptions from the Central Maui School impact fees and will contribute to the required impact fees as a proposed mitigative measure.

Comment:

5. Play areas and Parks: The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will likely be many children in a project catering to young families who do not have the income to purchase a home. There will be many toddlers who will use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). Older children will need to get to other parks along streets that currently have inadequate sidewalks and by crossing several very busy and dangerous high traffic avenues. These impacts need to be evaluated and mitigated, or an EIS needs to be prepared.

Response to comment:

The Applicant will provide recreational amenities for the project in the form of the four play areas, as well as a swimming pool, recreation center and barbecue areas. The Applicant during the new EA process will continue consultation with the Department of Parks and Recreation.

Comment:

6. Water: The Draft-EA (PDF Pages 44 + 45) and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gallons for fire flow. The impacts that this project will have on Central and South Maui developments that depend on the Central Maui water systems need to be evaluated and mitigated, or an EIS prepared.

Response to comment:

While comments received from the Department of Water Supply (DWS) did not indicate that there is no capacity to accommodate the proposed project, the applicant will continue to dialogue with the DWS to ensure the availability of water for the project.

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Again, thank you for your comments. Your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

GRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Donnie McGean
272 Halenani Drive
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. McGean:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

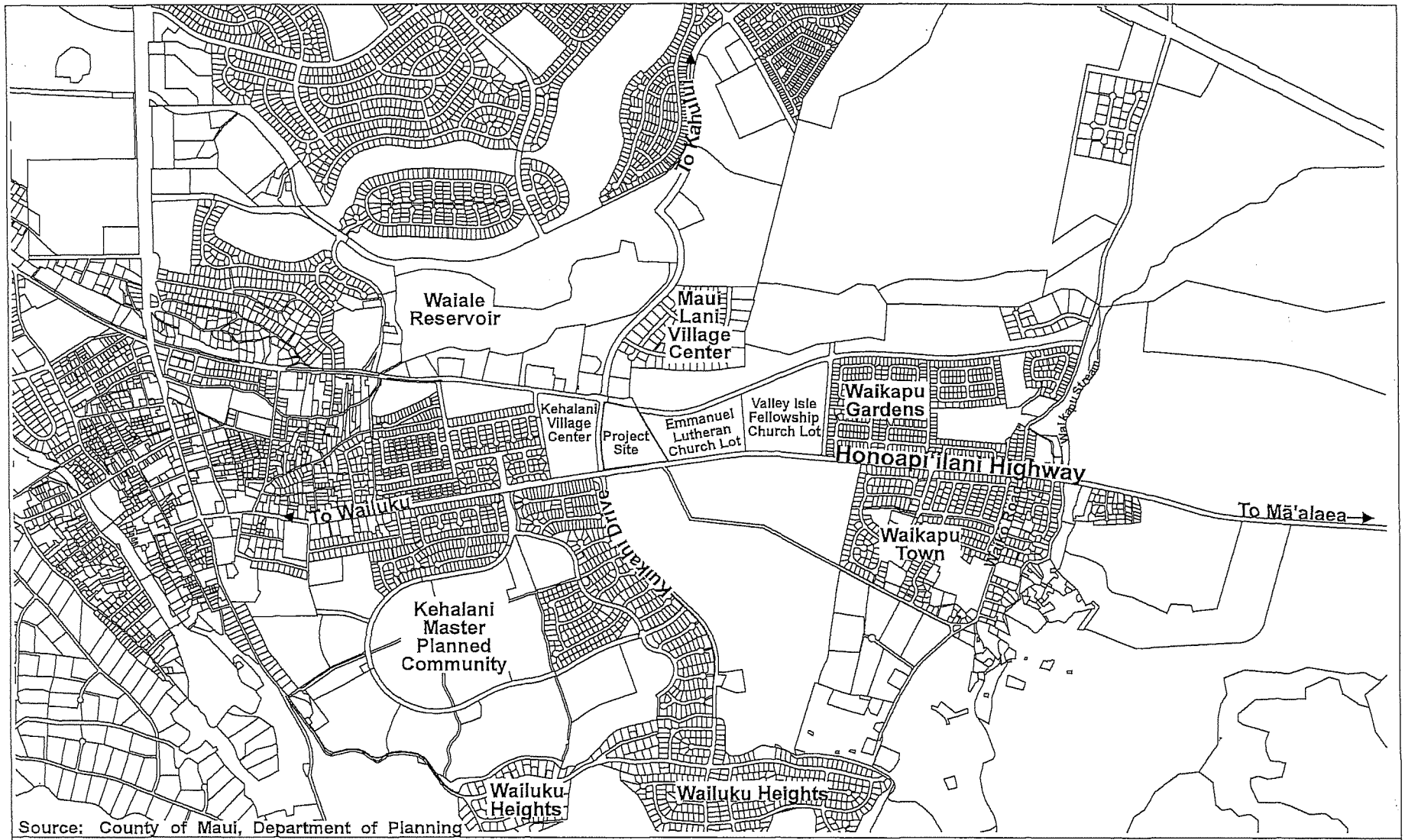


Figure 1

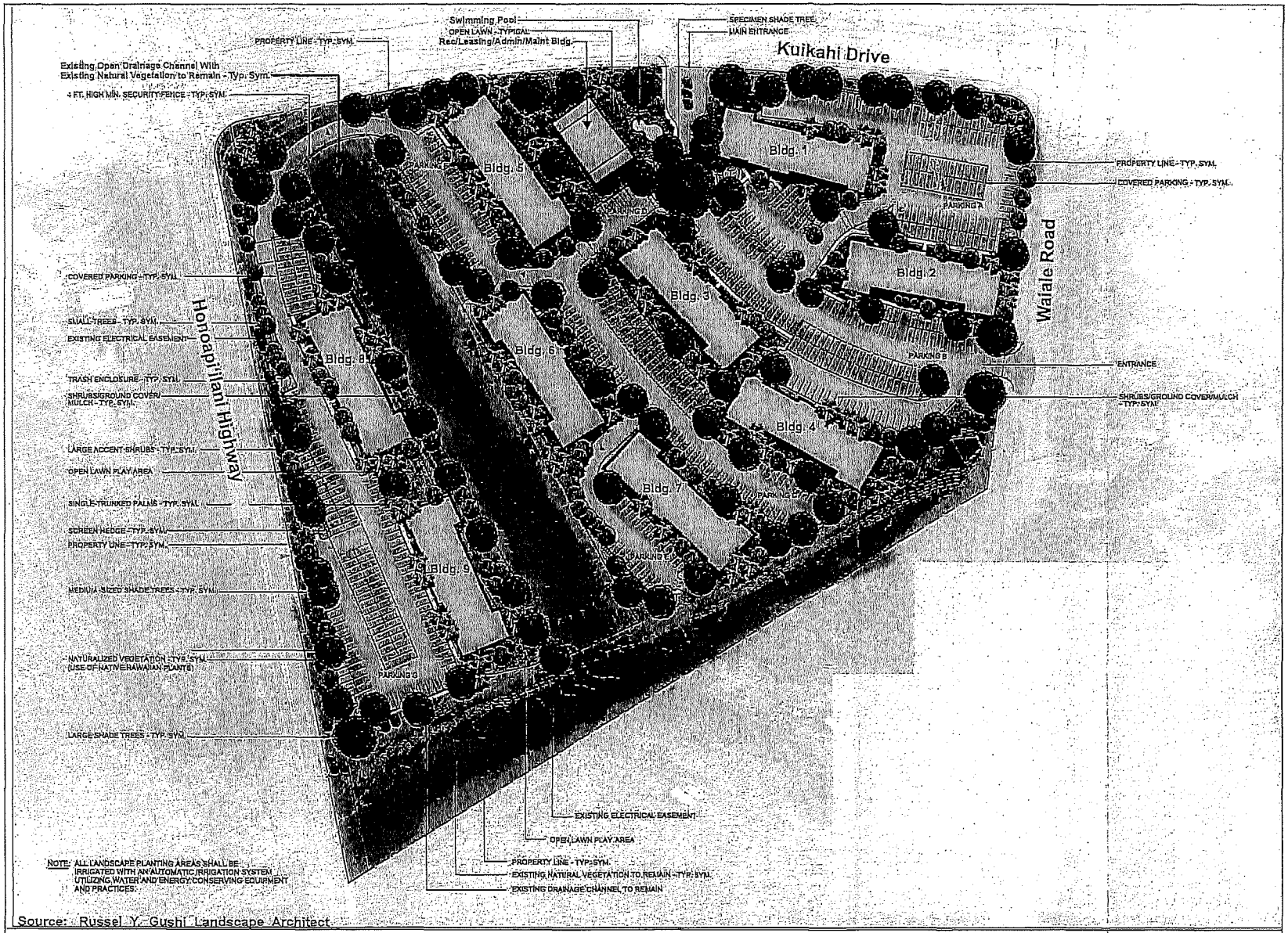
Wailuku Apartment Rental Housing Project
Regional Location Map

1,000 Feet
0 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

From: Donnie McGean [mailto:donniemcgean@gmail.com]
Sent: Thursday, October 19, 2017 1:51 PM
To: Takahashi, Ken T <ken.t.takahashi@hawaii.gov>
Subject: Wailuku-Waikapu Apartment Rental Project

Dear Mr. Takahashi;

Thank you for allowing me to comment on this project. I do not feel this project as it is planned is good for our community. Growth in this area has skyrocketed over the past few years and the infrastructure cannot handle what we already have. The exemptions which severely limit infrastructure improvement will mean that residents of the area will see their standard of living degraded.

Waiale Rd. especially needs improving. A pedestrian was killed two nights ago on an unimproved portion of Waiale Rd. The turn lanes leading to the lights in the area are not long enough and cars spill into the through lanes already. Expecting people not to cross to the Foodland at the entrance located on Kuakahi Dr and expecting them to walk away from the shopping center in order to cross at a light is preposterous.

I also worry that there will not be enough parking within the complex which will mean on street parking on Waiale Rd. I have seen every complex built on Maui since 1990 be built with insufficient parking. The planners always underestimate the amount of parking places that will be needed. This will cause vehicles to be parked on the street on Waiale Rd.

It would also make sense to me to put workforce housing near the work. South Maui, West Maui, Kahului and the new Pu'une'ne shopping area are where the jobs are. Except for government there are very jobs near the location planned. This means everyone will have to drive a good distance to get to work.

On Maui we all know the need for workforce housing. This neighborhood is not ready for this type of dense housing. We already are bursting without any significant roadway infrastructure upgrades.

One last thing if I may. Except for a few pockets on the island, all housing is workforce. We all work, many of us more than one job. Why are not the exemptions needed to make this affordable given to anyone that works on Maui. It basically says to me that one of the reasons housing is expensive on Maui is the cost of regulation by the county and state.

I do not think that this dense of a project fits into our neighborhood at this time. Therefore as it is planned, I oppose it.

Sincerely,
Donnie McGean

272 Halenani Dr.
Wailuku, Hi 96793
808-283-8457

1

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Donnie McGean
272 Helenani Drive
Wailuku, HI 96793

Dear Donnie McGean:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA, which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We hope this provides a thorough response to your letter dated October 19, 2017 which was addressed to Mr. Ken Takahashi from the Hawaii Housing Finance Development Corporation (HHFDC).

Comment:

Waiale Rd. especially needs improving. A pedestrian was killed two nights ago on an unimproved portion of Waiale Rd. The turn lanes leading to the lights in the area are not long enough and cars spill into the through lanes already. Expecting people not to cross to the Foodland at the entrance located on Kuakahi Dr and expecting them to walk away from the shopping center in order to cross at a light is preposterous.

Response to comment:

Recently the frontages along Kehalani Village Center have been improved with curbs, gutters and sidewalks. Our project proposes to extend the sidewalk along Waiale Road fronting our project, as well as improve roadways entering our driveway entrances on Kuikahi Drive and Waiale Road. Although we are unable to solve the existing deficiencies along Waiale Road, we will implement measures to address the impacts resulting directly from our project.

Comment:

I also worry that there will not be enough parking within the complex which will mean on street parking on Waiale Rd. I have seen every complex built on Maui since 1990 be built with insufficient parking. The planners always underestimate the amount of parking places that will be needed. This will cause vehicles to be parked on the street on Waiale Rd.

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Response to comment:

The Applicant will review the project plans to determine if additional parking can be provided. This information will be addressed in the new EA.

Comment:

It would also make sense to me to put workforce housing near the work. South Maui, West Maui, Kahului and the new Pu'une'ne shopping area are where the jobs are. Except for government there are very jobs near the location planned. This means everyone will have to drive a good distance to get to work.

Response to comment:

The location of rental housing near the centers of employment is ideal. However, the reality is there is a severe island-wide shortage of affordable rental housing, especially for those in the lower income groups. Increasing the inventory of affordable rental housing will help to reduce this shortage. The proposed apartment rental project will provide at least 60 percent of the units meeting the affordable income levels for Maui island. To encourage the use of public transportation the applicant will work with the County of Maui Department of Transportation to establish a bus stop near the project.

Comment:

On Maui we all know the need for workforce housing. This neighborhood is not ready for this type of dense housing. We already are bursting without any significant roadway infrastructure upgrades.

Response to comment:

We note your concern regarding the density of the project to the surrounding neighborhood. The proposed project is separated from other residential communities by the Kehalani Village Center to the north, Maui Lani commercial properties to the East, Honoapiilani Highway and vacant land to the west and vacant church properties to the south. Along Waiale Road is the existing Ka Hale A Ke Ola Homeless shelter that provides transitional rental apartment housing. The proposed action provides much needed affordable housing in an area proximate to infrastructure and urban services.

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WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Again, thank you for your comments. Your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Richard "Dick" Mayer
1111 Lower Kimo Drive
Kula, Hawai'i 96790

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Mayer:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

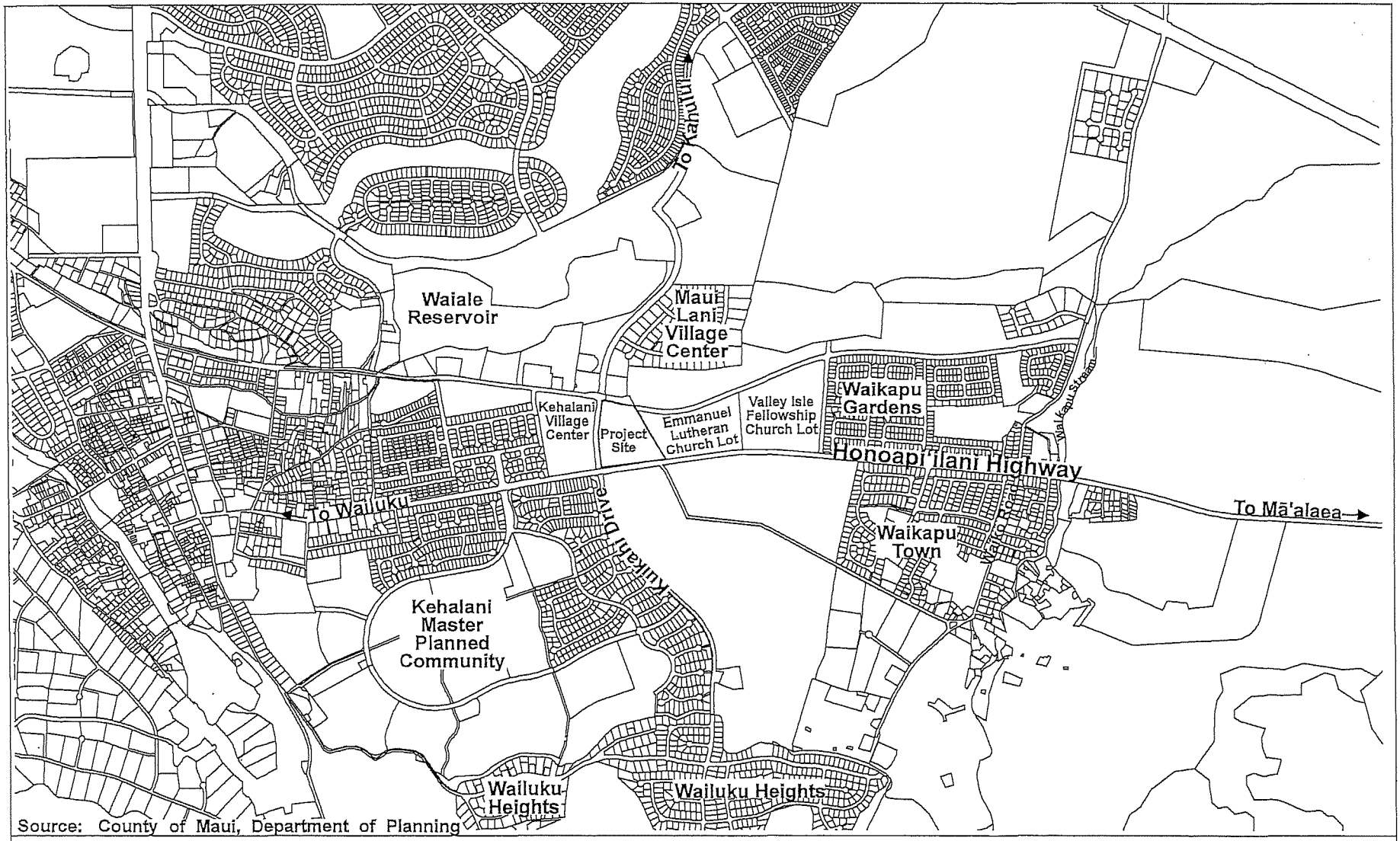


Figure 1

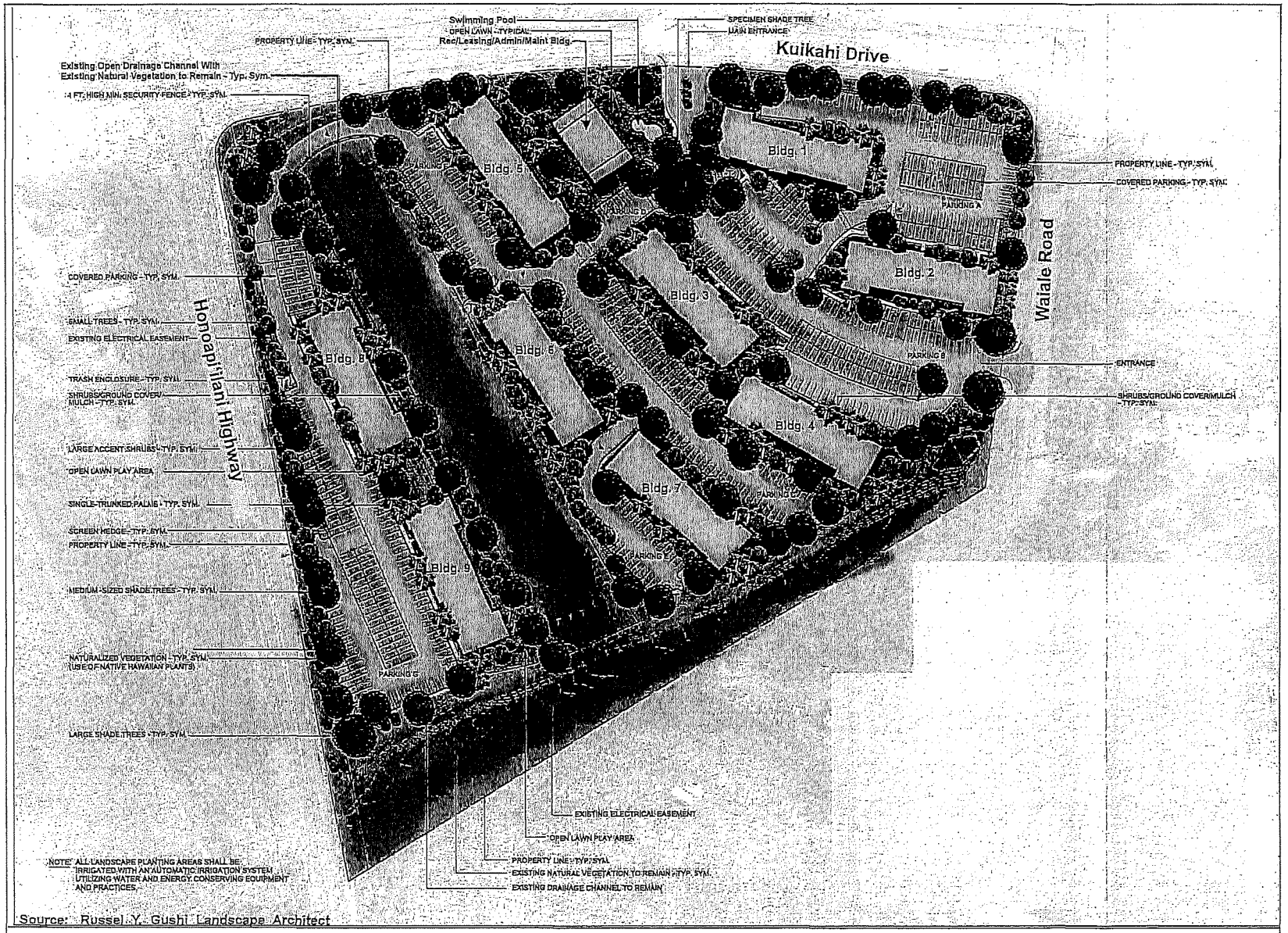
Wailuku Apartment Rental Housing Project
Regional Location Map

1,000 0 Feet 500 2,000

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russell Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Legacy\Wailuku Afford Rental\Applications\Figures\Conceptual Site Plan(ECL)

Attachment "A"

To: **Mr. Ken Takahashi,** (808) 587-0547, ken.t.takahashi@hawaii.gov
Hawai'i Housing Finance Development Corporation (HHFDC)
677 Queen Street, Room 300, Honolulu, HI 96813

October 22, 2017
To: **Mr. Vince Bagoyo** 808-357-3842 vbagoyo-devgroup@hawaii.rr.com
V. Bagoyo Development Consulting Group, LLC 1500 Kilinoe Pl., Wailuku, HI 96793

From: Richard "Dick" Mayer dickmayer@earthlink.net
1111 Lower Kimo Dr. Kula, Maui HI 96790

RE: **Wailuku Apartment Rental Housing Project DEA (AFNSI)**

SUMMARY **Multiple affordable housing projects are needed on Maui, ones that will meet our local residents' housing needs. HOWEVER, this project includes:**
-- **too many market units resulting in a very crowded project with undesirable impacts;**
-- **far too many 201-h exemptions that will cost the community dearly; and**
-- **several severe impacts (some disclosed and others not described) that necessitate a complete EIS, (not just an EA with a FONSI).**

WARNING: Because there are so many actual impacts from this proposed project, it is likely that someone will sue the applicant and/or approving authority if the FONSI is granted and a full EIS is not required.

Specific comments on the Wailuku Apartment Rental Housing Project D-EA (AFNSI):

1. This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do exist, a full Environmental Impact Statement (EIS) should be required by the Hawai'i Housing Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project. **A "Full EIS" is needed and should be required to examine the many significant impacts and how they will be mitigated.**

2. As stated on Draft-EA Page 5, the Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes.

The document includes an absurd number of exemptions (26 pages listed on D-EA pages 77-103) that are being requested. The very fact that these 26 pages of exemptions (the most we have yet to see) are included may be a hint that there are numerous significant impacts that the applicant wishes to not disclose. **Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, etc. MUST be discussed and mitigated. They are not.**

3. Throughout the exemptions discussion (Pages 77 - 103), the DRAFT-EA makes the statement that cost savings will save the renters considerable amounts of money. For example: ". . . when doing so will offer little or no benefit to project residents but whose cost will add significantly to their rents."
There is no indication why the affordable rents would be affected. Instead it would seem that the exemptions will merely save funds for the mainland investors and have no effect on the rents that they are allowed to charge to meet affordable rental requirements.

4. The most significant omissions in the Draft-EA relate to traffic.

4.A See Draft-EA pages 39-41 and Appendix E. The Draft-EA TIAR traffic analysis has selectively and intentionally screened out for inclusion and consideration several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center. They are described in the text, but not included in the TIAR analysis.

Both of these projects have received initial entitlements already and it is likely that they will soon be impacting this 201-h affordable apartment project's traffic in a very significant manner. A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts. Those other projects have completed and have already-approved environmental documents with comprehensive TIAR information. That information was available to Austin Tsutsumi & Associates who refused to include it in their TIAR, rendering the Draft-EA data inadequate.

Since there is a total potential of: 1,440+146+2,550+935+956+324 = **6,351 units in this already congested area,** the cumulative traffic being generated from these five nearby projects could significantly affect the already very limited roads in the area, I request that the HHFDC and the Maui Planning Organization (MPO) require:

i) that, along with the other developers, Wailuku Affordable Apartment project be required to provide a "fair share" of the cost of: a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems ; and

ii) that, along with the other major developments, Wailuku Affordable Apartment project be required to pay its "fair share" to upgrade the highways, roads and intersections in this area.

4.B Even though this project will not be completed until 2021, the TIAR has used 2020 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

5. Draft-EA Page 16: Although this project is being described as a 201-h affordable housing project, in fact **only 55 out of 324 units (only 17% of the units) are for those under 100% of the median income (the AMI).** In other words 269 units (the vast majority) are for those over the median income, either as market units or more expensive affordables.

6. The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. **In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.**

7. Schools: There is a listing on Draft-EA pages 36+37 of Central Maui schools, but no indication how close to capacity each of these schools already is and what the impact would be from the additional 324 housing units. Because there is no analysis of potential enrollments there is absolutely no basis for making the statement in the Draft-EA, "No further mitigative measures are expected to be required." (Page 37) In fact there will be impacts that need to be considered. Students from further away will move to this area. Any exemption from the DOE's "School Impact Fee" is not warranted.

8. Finances: Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Affordable Apartment project. They have already received several entitlements without trying to get any 201-h exemptions.

9. Play areas and Parks: The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great. However, among the 1,000 residents there will be many toddlers who will use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). The greater impact will fall on the many (maybe 100 – 200) children of school age. These children will need to get to parks along streets with minimum sidewalks and by crossing several very busy and dangerous high traffic avenues.

10. The Draft-EA on page 39 mentions a private company being responsible for Waste disposal. "Solid waste collection services for the project will be provided by a privately-managed company." Who will be required to pay for this company? Residents in affordable units?

In the same section a vague reference to a recycling plan is made: "residents will be encouraged to implement waste recycling programs to reduce the amount of waste." How will the "plan" work and who is responsible?

The Draft-EA does not show any locations for solid waste disposal / trash bins. Nor does it seem that big rubbish trucks will be able to turn around at the end of the 300'+ driveway.

11. There are numerous impacts resulting from the inadequate sidewalks and crosswalks. The Draft-EA PDF Page 14 states that the project can gain 201-h approval "provided that the proposed housing project is consistent with the purpose and intent of Section 201H-38, HRS, and **the project's design meets all health and life safety requirements per the building code and Maui County Code.**" I believe that there are some serious safety issues that cannot be overlooked.

The Draft-EA page 19 indicates an elevation difference of 54'. "Elevations across the project site range from approximately **360 feet** at its southwest corner, to roughly **306 feet** at its northeast corner." That means carrying groceries uphill from the intersection to the upper buildings will be like going up a 5 story staircase. .

The long list of exemptions, if adopted, would make it very difficult for residents in the upper half of the project to go across the street to the Foodland or Long's store because there is no nearby crosswalk, even though there is an auto driveway available. That is because there is no sidewalk along Kuikahi; only a grass shoulder of undefined width. There is no crosswalk along Kuikahi, except down at the projects lower corner.

There is no sidewalk along Honopiilani Hwy.

Furthermore there is only a partial sidewalk along Waiale. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. They will need a complete sidewalk along Waiale and it should be provided.

12. Maps on page 4 + 9 do not show projects to the South and to the East. This should include: 467 affordable house subdivision (Waikapu Gardens Subdivision Phases 1 and 2), 2,550 unit Waiale, 1,450 unit Waikapu Town, the70-lot affordable fee simple housing project, etc.,

13. WATER The Draft-EA PDF Pages 44 + 45 and Appendix D assumes that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gal for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with many sizeable affordable units)?

14. Parking Draft-EA PDF Page 10 Only 486 parking stalls (1.5 parking stall per unit) No visitor parking? Handicapped?

15. Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night will firetrucks be able to access all buildings and be able to turn around or safely back-up?

16. It is important to understand the impacts of the project's ownership + management. Completely unanswered in the Draft-EA is any reference to the ownership and management of the project. Will the County have any responsibilities (Repairs? Ownership? Management? Utilities? Insurance? etc.) What are the rights and responsibilities of the tenants?

Who will own the apartments? The affordables units? The market units?

Who will manage the property? Establish homeowner association fees?

The Draft-EA doesn't answer any of those questions. Therefore the impacts have yet to be discussed.

17. How will rental prices be controlled for 30 years? County? Developer? After the 30 years what will happen? Will renters ever have the right to purchase?

18. On PDF pages 4 and 108 There is a pretty, but very misleading painting showing a huge grass buffer and an empty parking lot. That is not how the project will appear. The proposed buffer is tiny and the parking lot will be packed.



SUMMARY **Multiple affordable housing projects are needed on Maui, ones that will meet our local residents' housing needs. HOWEVER, this project includes:**
-- too many market units resulting in a very crowded project with undesirable impacts;
-- far too many 201-h exemptions that will cost the community dearly; and
-- several severe impacts (some disclosed and others not described) that necessitate a complete EIS, (not just an EA with a FONSI).

WARNING: Because there are so many actual impacts from this proposed project, it is likely that someone will sue the applicant and/or approving authority if the FONSI is granted and a full EIS is not required.

Mahalo for allowing me the opportunity to share my comments on the Draft-EA and to make my concerns known,

Richard D. Mayer

CC Maui County Councilmember Stacey Crivello, Chair, Housing Committee
Maui County Councilmember Kelly King, Chair, Planning Committee
Maui County Councilmember Alika Atay, Wailuku Residency Councilmember
Director Carl Reimann, Maui County Housing and Human Affairs Department
Director Will Spence, Maui County Planning Department

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Richard "Dick" Mayer
1111 Lower Kimo Drive
Kula, Maui 96790

Dear Mr. Mayer:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA, which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 22, 2017 which was addressed to Mr. Ken Takahashi from the Hawaii Housing Finance Development Corporation (HHFDC) and myself. We have carefully taken every comment (italicized) and provided a direct response to each item below.

Comment:

SUMMARY Multiple affordable housing projects are needed on Maui, ones that will meet our local residents' housing needs. HOWEVER, this project includes:

-- too many market units resulting in a very crowded project with undesirable impacts;

Response to comment:

This project is one of the few privately funded workforce rental project proposed in Maui County in recent years. Rental projects are rarely developed in Hawaii. Maui County has not had a private workforce rental project developed in over a decade. The reason is that it is very difficult to achieve feasibility because of the high-cost of land and construction, ~~but~~ although the demand is great for local families. The applicant proposes to utilize the 201H ~~project~~ process with a mix of 60% of the units (195 units) with rents that are affordable from 80% area median income (AMI) to 140% AMI while the remaining 40% of the unit mix (129 units) are open to the market. The proposed 40% market units will help to cross subsidize the 60% affordable units. Maui's land available for growth near our urban towns are ~~is~~ limited. To avoid sprawl, protect the environment, and ensure that our resource uses are sustainable the Maui Island Plan has designated urban growth boundaries which includes the project site. The Applicant seeks a balance between being able to provide for the affordable housing needs of our local families in a cost-efficient manner with a density that is appropriate for the surrounding neighborhood.

Comment:

-- far too many 201-h exemptions that will cost the community dearly; and

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VBAGOYO-DEVGROUP@HAWAII.RR.COM

Response to comment:
The applicant proposes to re-evaluate the requested exemptions in keeping with the objective of maintaining public health and safety while providing opportunity for achieving a higher degree of project development efficiency.

Comment:

– *several severe impacts (some disclosed and others not described) that necessitate a complete EIS, (not just an EA with a FONSI).*

Response to comment:

As mentioned previously a new EA will be prepared for the proposed project. Pursuant to the requirements of Chapter 343, Hawaii Revised Statutes (HRS) and Title 200 Department of Health, Hawaii Administrative Rules (HAR), the new EA will be evaluated by HHFDC as to its adequacy and HHFDC will make a determination whether an Environmental Impact Statement (EIS) will be required.

Comment:

1. *This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do exist, a full Environmental Impact Statement (EIS) should be required by the Hawai'i Housing Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project. A "Full EIS" is needed and should be required to examine the many significant impacts and how they will be mitigated.*

Response to comment:
As mentioned previously, a new EA will be prepared for the proposed project. Pursuant to the requirements of Chapter 343, Hawaii Revised Statutes (HRS) and Title 200 Department of Health, Hawaii Administrative Rules (HAR), the new EA will be evaluated by HHFDC as to its adequacy and HHFDC will make a determination whether an Environmental Impact Statement (EIS) will be required.

Comment:

As stated on Draft-EA Page 5, the Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes.
The document includes an absurd number of exemptions (26 pages listed on D-EA pages 77-103) that are being requested. The very fact that these 26 pages of exemptions (the most we have yet to see)

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are included may be a hint that there are numerous significant impacts that the applicant wishes to not disclose. Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, etc. MUST be discussed and mitigated. They are not.

Response to comment:

As mentioned previously, the applicant proposes to re-evaluate the requested exemptions. As part of the new EA an evaluation of the impacts of the proposed exemptions, as may be appropriate will be addressed.

Comment:

3. Throughout the exemptions discussion (Pages 77 - 103), the DRAFT-EA makes the statement that cost savings will save the renters considerable amounts of money. For example: ". . . when doing so will offer little or no benefit to project residents but whose cost will add significantly to their rents." There is no indication why the affordable rents would be affected. Instead it would seem that the exemptions will merely save funds for the mainland investors and have no effect on the rents that they are allowed to charge to meet affordable rental requirements.

Response to comment:

You are correct that the affordable rents would not be affected because they are restricted by Maui County. However, the exemptions will provide savings that will help to subsidize the affordable rentals through the reduction of the design, permitting, and construction costs for the project that are being carried primarily by the market units.

Comment:

4. The most significant omissions in the Draft-EA relate to traffic.

4.A See Draft-EA pages 39-41 and Appendix E. The Draft-EA TIAR traffic analysis has selectively and intentionally screened out for inclusion and consideration several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center. They are described in the text, but not included in the TIAR analysis.

Both of these projects have received initial entitlements already and it is likely that they will soon be impacting this 201-h affordable apartment project's traffic in a very significant manner. A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts. Those other projects have completed and have already-approved environmental documents with comprehensive TIAR information. That information was available to Austin Tsutsumi & Associates who refused to include it in their TIAR, rendering the Draft-EA data inadequate.

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Since there is a total potential of: 1,440+146+2,550+935+956+324 = 6,351 units in this already congested area, the cumulative traffic being generated from these five nearby projects could significantly affect the already very limited roads in the area, I request that the HHFDC and the Maui Planning Organization (MPO) require:

i) that, along with the other developers, Wailuku Affordable Apartment project be required to provide a "fair share" of the cost of: a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems ; and

ii) that, along with the other major developments, Wailuku Affordable Apartment project be required to pay its "fair share" to upgrade the highways, roads and intersections in this area.

Response to comment:
Your comments have been forwarded to the traffic engineer. The traffic reports prepared for A&B's Waiale project and the Waikapu Town Center will be reviewed and as may be appropriate the traffic report for the project will be revised.

Comment:
4.B Even though this project will not be completed until 2021, the TIAR has used 2020 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

Response to comment:
The Applicant will coordinate with the traffic engineer to address the 2021 build out.

Comment:
5. Draft-EA Page 16: Although this project is being described as a 201-h affordable housing project, in fact only 55 out of 324 units (only 17% of the units) are for those under 100% of the median income (the AMI). In other words 269 units (the vast majority) are for those over the median income, either as market units or more expensive affordables.

Response to comment:
The Wailuku Apartment Rental Housing project is intended to provide a range of rental units in accordance with the income and rental requirements of HHFDC and the County of MauiThe Applicant believes that housing demand reaches across various income categories which can be addressed by the proposed action.

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Comment:

6. The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.

Response to comment:

Your concerns regarding the adequacy of the evaluation on impacts on infrastructure, such as schools and other facilities, will be re-evaluated in the new EA and proposed mitigation, as may be appropriate, will be included in the new EA.

Comment:

7. Schools: There is a listing on Draft-EA pages 36+37 of Central Maui schools, but no indication how close to capacity each of these schools already is and what the impact would be from the additional 324 housing units. Because there is no analysis of potential enrollments there is absolutely no basis for making the statement in the Draft-EA, "No further mitigative measures are expected to be required." (Page 37) In fact there will be impacts that need to be considered. Students from further away will move to this area. Any exemption from the DOE's "School Impact Fee" is not warranted.

Response to comment:

The Department of Education (DOE) provided comments on the Draft EA, which will be included in the new EA to be prepared. The DOE will be contacted to provide additional input on educational facilities within the project area. As advised by the DOE, the applicant will not be seeking any exemptions from the Central Maui School impact fees and will contribute to the required impact fees as a proposed mitigative measure.

Comment:

8. Finances: Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Affordable Apartment project. They have already received several entitlements without trying to get any 201-h exemptions.

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Response to comment:

Due to the scale of these projects, there are a greater number of units in which the developer can spread the design, permitting, construction and financing costs associated with subsidizing the affordable units. The Wailuku Apartment Rental Housing project has less units in which to spread these costs and the reduction in costs from the requested exemptions will make the project financially feasible.

Comment:

9. Play areas and Parks: The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great. However, among the 1,000 residents there will be many toddlers who will use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). The greater impact will fall on the many (maybe 100 – 200) children of school age. These children will need to get to parks along streets with minimum sidewalks and by crossing several very busy and dangerous high traffic avenues.

Response to comment:

The Applicant will provide some recreational amenities for the project in the form of the four play areas, as well as a swimming pool, recreation center and barbecue areas. The new EA will evaluate the recreational needs for the project and its impact on recreational resources and propose mitigative measures, as may be appropriate. The Applicant during the new EA process will continue consultation with the Department of Parks and Recreation.

Comment:

10. The Draft-EA on page 39 mentions a private company being responsible for Waste disposal. "Solid waste collection services for the project will be provided by a privately-managed company." Who will be required to pay for this company? Residents in affordable units?

Response to comment:

The owner of the apartment complex will be required to pay for private trash pick-up. Residents will need to pay as part of their utility expense. ffordable units can only be charged rent plus utilities, which includes trash pick-up, up to a maximum of 30% of their gross income. Any costs for utilities above this maximum will need to be carried by the market rentals.

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Comment:
In the same section a vague reference to a recycling plan is made: "residents will be encouraged to implement waste recycling programs to reduce the amount of waste." How will the "plan" work and who is responsible?

Response to comment:
Residential management of the project will be responsible for developing and implementing such a program. Details of this program have not been developed but will be implemented if the project moves forward.

Comment:
The Draft-EA does not show any locations for solid waste disposal / trash bins. Nor does it seem that big rubbish trucks will be able to turn around at the end of the 300'+ driveway.

Response to comment:
Our architecture and engineering team have made accommodations to ensure that large trucks will be able to enter the property to dispose of trash. Locations for trash will be identified as we further develop the site plan and will meet all county and state codes and regulations regarding trash disposal.

Comment:
11. There are numerous impacts resulting from the inadequate sidewalks and crosswalks.
The Draft-EA PDF Page 14 states that the project can gain 201-h approval "provided that the proposed housing project is consistent with the purpose and intent of Section 201H-38, HRS, and the project's design meets all health and life safety requirements per the building code and Maui County Code." I believe that there are some serious safety issues that cannot be overlooked.

The Draft-EA page 19 indicates an elevation difference of 54'. "Elevations across the project site range from approximately 360 feet at its southwest corner, to roughly 306 feet at its northeast corner." That means carrying groceries uphill from the intersection to the upper buildings will be like going up a 5 story staircase. .

The long list of exemptions, if adopted, would make it very difficult for residents in the upper half of the project to go across the street to the Foodland or Long's store because there is no nearby crosswalk, even though there is an auto driveway available. That is because there is no sidewalk along Kuikahi; only a grass shoulder of undefined width. There is no crosswalk along Kuikahi, except down at the projects lower corner.

There is no sidewalk along Honopiilani Hwy.

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Furthermore there is only a partial sidewalk along Waiale. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. They will need a complete sidewalk along Waiale and it should be provided.

Response to comment:

Your concerns regarding inadequate sidewalks and crosswalks will be reviewed in the new EA. The applicant will continue to coordinate street improvements for the project with the Department of Public Works to ensure the safety of pedestrians in the area, as well as investigate measures that promote pedestrian safety.

Comment:
12. Maps on page 4 + 9 do not show projects to the South and to the East. This should include: 467 affordable house subdivision (Waikapu Gardens Subdivision Phases 1 and 2), 2,550 unit Waiale, 1,450 unit Waikapu Town, the70-lot affordable fee simple housing project, etc.,

Response to comment:

We will take your comments under advisement, however, the intent of these maps is to show the general location of the project site in relation to what is existing and not any future projects that may be proposed in the Wailuku-Kahului Town area.

Comment:
13. WATER The Draft-EA PDF Pages 44 + 45 and Appendix D assumes that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gal for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with many sizeable affordable units)?

Response to comment:

While comments received from the Department of Water Supply (DWS) did not indicate that there is no capacity to accommodate the proposed project, the applicant will continue to dialogue with the DWS to ensure the availability of water for the project.

Comment:
14. Parking Draft-EA PDF Page 10. Only 486 parking stalls (1.5 parking stall per unit) No visitor parking? Handicapped?

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Response to comment:

The Applicant will review the project plans to determine if additional parking can be provided. This information will be addressed in the new EA.

Comment:
15. Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night will firetrucks be able to access all buildings and be able to turn around or safely back-up?

Response to comment:
The Draft EA has been reviewed by the County Fire Department. The Fire Department has indicated that the project will need to meet their fire code requirements when the plans are submitted for building permits. The applicant will ~~intend to~~ comply with all code requirements. We note that the buildings as being designed will be fully sprinkled which will provide an added layer of safety for the residents.

Comment:
16. It is important to understand the impacts of the project's ownership + management. Completely unanswered in the Draft-EA is any reference to the ownership and management of the project. Will the County have any responsibilities (Repairs? Ownership? Management? Utilities? Insurance? etc.)

Response to comment:
The County will not be responsible for repairs, management, utilities, insurance, etc. It will be the responsibility of ownership to manage this project and its operations. The County's only responsibility is to ensure we are audited annually to ensure we are providing affordable rents to 195 units that are deemed restricted.

Comment:
What are the rights and responsibilities of the tenants?

Response to comment:
As owners we must follow the State of Hawaii law on tenant rights.

Comment:
Who will own the apartments?

Response to comment:
Legacy Wailuku, LLC which comprises of a partnership between Legacy Partners and Pier Investments will own the apartments.

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Comment:
The affordables units? The market units?

Response to comment:
As rental units, Legacy Wailuku, LLC will own both the affordable and market units.

Comment:
Who will manage the property?

Response to comment:
Legacy Wailuku, LLC will hire a local third-party property management company.

Comment:
Establish homeowner association fees?

Response to comment:
There are no homeowner association fees.

Comment:
17. How will rental prices be controlled for 30 years? County? Developer? After the 30 years what will happen? Will renters ever have the right to purchase?

Response to comment:
Rental prices are annually determined by HUD and the Hawaii Housing Finance Development Corporation, which ownership must follow. After the 30-year deed restriction has expired the units may continue to be affordable or may go to market depending on the decision of ownership. Renters will not have the right to purchase based on our specific program. Maui County's households are 42 percent renters, that's 22,639 households. This project aims to meet this demand in the community.

Comment:
18. On PDF pages 4 and 108 There is a pretty, but very misleading painting showing a huge grass buffer and an empty parking lot. That is not how the project will appear. The proposed buffer is tiny and the parking lot will be packed.

Response to comment:

The rendering is a perspective drawing to depict visually of how the structures will appear. We will request the architect provide a visual analysis of the project to be included in the new EA.

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BAGOYO
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Again, thank you for your comments. Your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at 357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

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Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

January 26, 2018

Wallette Garcia Pellegrino
1420 Kilohi Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Pellegrino:

Legacy Wailuku, LLC (Applicant), through the Hawaii Housing Finance and Development Corporation (HHFDC), published a Draft Environmental Assessment (EA) in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control (OEQC). Comments were received from your agency and a response letter was provided by Bagoyo Development Group, the preparer of the Draft EA. See **Attachment "A"** and **Attachment "B"**. In consultation with OEQC, the Draft EA was withdrawn by HHFDC by letter dated January 19, 2018. See **Attachment "C"**.

Munekiyo Hiraga has been requested by the Applicant to re-initiate the environmental review process pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). As such, we are requesting early consultation comments on the proposed project. The Wailuku Apartment Rental Housing project is identified as Tax Map Key (2)3-5-001:064 and is bounded by Honoapi'ilani Highway to the west, Kuikahi Drive to the north, and Waiale Road to the east. See **Figure 1**, Regional Location Map.

Legacy Wailuku, LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 486 parking stalls. The project will also include a recreation center, leasing offices, swimming pool, barbeque areas, and four (4) children play areas. See **Figure 2**, Conceptual Site Plan.

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any additional comments you may have by February 16, 2018. Please address written comments to the following:

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (Comments Rec).doc

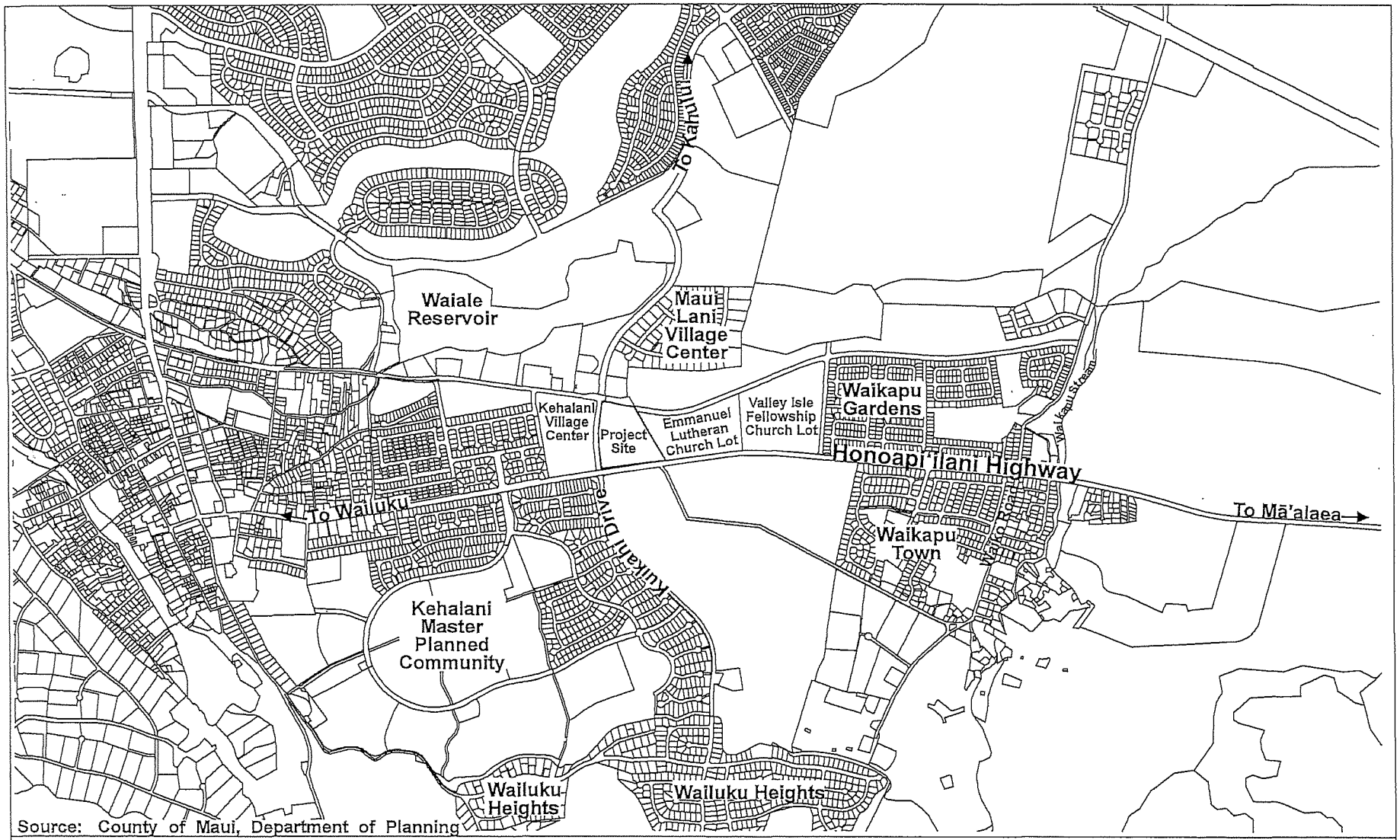


Figure 1

Wailuku Apartment Rental Housing Project

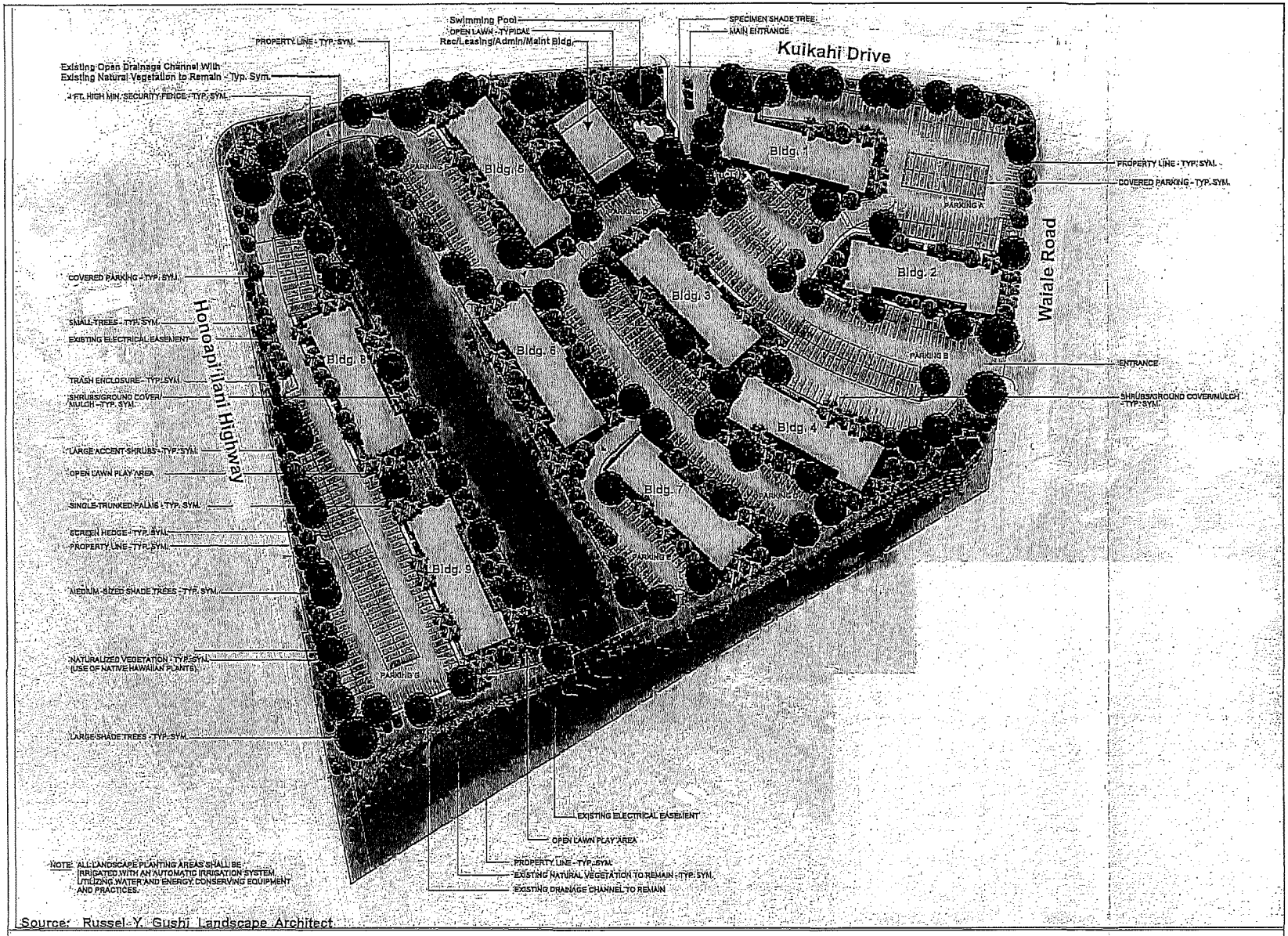
Regional Location Map

0 500 1,000 2,000 Feet

MUNEKIYO HIRAGA

Prepared for: Legacy Wailuku, LLC

Legacy\Wailuku Afford Rental\Applications\Figures\Regional Location Map(ECL)



Source: Russel Y. Gushi Landscape Architect

Figure 2

Wailuku Apartment Rental Housing Project

Conceptual Site Plan

NOT TO SCALE

Prepared for: Legacy Wailuku, LLC

MUNEKIYO HIRAGA

Attachment "A"

TO: Ken Takahashi, Hawai`I Housing Finance Development Corporation (HHFDC)
ken.t.takahashi@hawaii.gov
677 Queen Street, Room 300
Honolulu, HI 96813

FROM: Wallette Garcia Pellegrino /s/ WGP
1420 Kilohi Street (Waikapū)
Wailuku, HI 96793

DATE: October 23, 2017

SUBJECT: **REVISED**: Wailuku Apartment Rental Housing Project at Waiale Road, Wailuku, Island of Maui, TMK: (2) 3-5-001: 064 DEA (AFNSI)

Aloha.

I am writing to comment on the Draft Environmental Assessment Statement submitted by Vince Bagoyo Development Consulting Group (1500 Kilinoe Place, Wailuku, HI 96793) on behalf of Legacy Wailuku, LLC. Let me say that our community does acknowledge and supports the need for affordable housing. Therefore, the goal of the Wailuku Apartment Rental Housing Project appears to be honorable and to address, as other project proposals for the area do, the need for affordable housing. Having said that, I believe that the project as a whole, however, requires a much closer examination by the various departments and agencies which will authorize the project before it moves forward so that there is a balance between meeting the affordable needs of our community while at the same time offering a project that does not so drastically impact the surrounding areas.

I have read the document and am specifically concerned about the excessive number of requests for exemptions to various HRS and Maui County codes which set reasonable and good standards for developments. I will share some of my concerns: (statements from the developer's DEA are in quotation marks and underlined)

1. "The project will utilize the existing elevations of the site and limit the height of the buildings to 38-40 feet (three story building). ..The project is not part of a scenic corridor and will not affect views from inland vantage points." and "Exempt definition of "height." I disagree. The Wailuku to Waikapū corridor on the Honoapi`ilani Highway was always considered scenic with the monkeypod trees on both sides of the road, until land owners, developers and government deliberately chopped the Makai trees down or put up imposing walls (Mauka side). Daytime viewplanes have been negatively impacted. Nighttime viewplanes have also been negatively impacted from lights in housing developments (Waikapū Gardens and Waiolani) and other users (Valley Isle Fellowship Church facility). In addition, while the shopping complex north of Kuikahi is set low, the height of the brightly lighted signage, especially of Foodland at night is distressing (and potentially to nocturnal winged animals).

2. "The 14.416-acre project site does not impact the availability of agricultural lands on Maui." This should have been an earlier conversation with the original landowner who, after ending its original commitment to agriculture (sugar cane and pineapple), banked the land waiting for the opportunity to develop it.

3. "The project also proposes a 3 story garden style architecture which provides a more compact development to house more people on less land but does not compromise the view planes nor over densifies the area thereby also creating efficiencies to conserve precious land and infrastructure on Maui. The project will be designed to be complimentary to the neighboring existing residential developments in Kehalani, Maui Lani and Wailuku Town and help to meet the housing needs of Maui"

working families within the Kahului-Wailuku Community Plan District." and "The project designed floor plans and elevations (See Appendix I) are consistent and complimentary to the neighboring residential subdivisions in WaikapūTown." The orientation of this project is geared to an urban use and vision as opposed to what the people of Waikapū consider a part of its community. Up to this point, multi-person structures of this size have been focused on the north side of Kuikahi Drive (Kehalani, etc.) . The project now opens the door to increased density which changes the character of the greater Waikapū area, something the Waikapū Community Association has been watching carefully for many years. We expressed the importance of keeping a clear and separate boundary between Wailuku and Waikapū during the Maui Island Plan process in order to preserve Waikapū's sense of place and character, only to see that hope demolished when the MIP was finally approved. In addition, comparing this project to Waikapū Gardens which built lower than the highway, the view there is obstructed even by those two-story homes. What will a three-story high set of buildings do? Consider the impact of large-scale buildings located close to Kuikahi, Waiale, and Honoapi`ilani roads.

4. "There are no anticipated impacts to existing educational facilities or resources." Unrealistic and difficult to predict, based on the experiences of Pomaika`i and Pu`u Kukui campuses.

5. "Provide four distinct play areas for families on the property totaling 16,823 sf." Unrealistic and demeaning when you consider that the total square footage is no bigger than some of the lots in Wailuku Heights, divided into four areas.

6. "The site is within walking distance to neighborhood serving amenities." and "create a more walkable environment for the local residents of Wailuku. This allows young families who may purchase a for-sale home be able to visit extended family, like grandparents, that may want to rent in the proposed project to live in the same community by providing different housing choices close to each other. " The notion of "walkable communities" is built on a false premise. The fact is that people do not walk in neighborhoods except for people exercising. I travel these roads (Honoapi`ilani, Kuikahi, Waiale, Maui Lani Parkway) multiple times daily. You can count on one hand the number of people "walking" to and from Waikapū Gardens or Kehalani to the Foodland/Long's shopping complex. More people walk from Ka Hale O Ke Ola to the complex than even the closer Kaimana area. At night Kuikahi is not well lit nor are parts of North Waiale which has several crosswalks that are difficult to see. Considering the location of the proposed project, it is dangerous for pedestrians, even with sidewalks and curbs, given the speed cars travel on Kuikahi. I cringe thinking about an apartment resident trying to "chance um" and run across Kuikahi to save time. Installing a crosswalk or a lighted intersection from the project to the Kehalani shopping complex will impede traffic flow. This dilemma must be addressed.

   Related to that is the impact of traffic. Regardless what the Austin, Tsutsumi & Associates studies show, those of us who traverse Kuikahi and Waiale and Honoapi`ilani on a regular basis, during peak travel times as well as other times during the day and night, experience the logjam of cars, sometimes beginning at the junction of Kuikahi and Honoapi`ilani east to Waiale. Again, related to the false premise of walkable communities, we know that people will continue to use their cars even to just go to the Kehalani shopping complex and especially in light of the dangers of trying to cross that busy street. The proposed entrance/exit on Kuikahi will dump many more cars onto an already stressed roadway. How do we mitigate this problem?

   Residents will also join the line of cars on Maui Lani Parkway during both the week where traffic moving east backs up sometimes almost to Ace Hardware, and on week-ends when hundreds of cars park illegally on the beautiful tree-lined median strip because the huge Maui Lani Park built by the

County only has about 20 marked parking spaces to accommodate park users especially during soccer season. Such poor planning.

7. "Exempt parking requirement of 2 stalls per unit and allow 1.5 stalls per unit." Parking will become an issue and eyesore in the future. We are married to our cars and the closest Maui Bus stop at this time is near Ka Hale O Ke Ola, quite a distance to walk.

8. "Exempt the development from the fencing and landscape requirements of MCC 19.36A.070.A.1 beyond those fencing and landscape improvements which are specifically indicated on the proposed site plan. " A sterile, uninviting environment does not encourage people to care about their surroundings. This has been a problem with most major developments including high-end projects (except for resort destinations); minimal trees, minimal foliage; no shade, no ambience...no care.

There are many more items I would like to see addressed including what FACE Maui has expressed regarding the real affordability for Maui's families based on the median income percentages to be used to qualify for the affordable units, as well as availability of water resources; the exemption from the MCC Parks Assessment to reduce costs; and for the Maui County Council to be the decision-making authority for the request to change the state land use boundary and reclassify the approximately 14.416 acres of the property in order to fast-track the project.

Thank you for giving the public an opportunity to comment on the proposal.

Attachment "B"

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Wallette Garcia Pellegrino
1420 Kilohi Street
Wailuku, HI 96793

Dear Wallette Garcia Pellegrino:

We sincerely thank you for your review of our Draft Environmental Assessment (DEA) for the Wailuku Apartment Rental Housing project located at TMK (2) 3-5-001:064. Although we are responding to your comments and questions regarding the DEA, please be advised that the DEA, which you have reviewed will be withdrawn and a new EA prepared by another consultant. However, your comments and this response letter will be included in the new EA.

We sincerely hope this provides a thorough response to your letter dated October 23, 2017 which was addressed to Mr. Ken Takahashi from the Hawaii Housing Finance Development Corporation (HHFDC).

Comment:

1. *"The project will utilize the existing elevations of the site and limit the height of the buildings to 38-40 feet (three story building). ..The project is not part of a scenic corridor and will not affect views from inland vantage points." and "Exempt definition of "height."* *I disagree. The Wailuku to Waikapū corridor on the Honoapi`ilani Highway was always considered scenic with the monkeypod trees on both sides of the road, until land owners, developers and government deliberately chopped the Makai trees down or put up imposing walls (Mauka side). Daytime viewplanes have been negatively impacted. Nighttime viewplanes have also been negatively impacted from lights in housing developments (Waikapū Gardens and Waiolani) and other users (Valley Isle Fellowship Church facility). In addition, while the shopping complex north of Kuikahi is set low, the height of the brightly lighted signage, especially of Foodland at night is distressing (and potentially to nocturnal winged animals).*

Response to comment:

In response to your concerns regarding view planes, we will request the architect prepare a view analysis. The view analysis will be included in the new EA document. To minimize impacts on nocturnal winged animals, exterior lighting for the project will be in compliance with the County of Maui's Outdoor Lighting requirements and shall be shielded and down-lighted.

Comment:

2. *"The 14.416-acre project site does not impact the availability of agricultural lands on Maui."* *This should have been an earlier conversation with the original landowner who, after ending*

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its original commitment to agriculture (sugar cane and pineapple), banked the land waiting for the opportunity to develop it.

Response to comment:
Although the subject property was once in sugar cane cultivation, it has been left fallow since the closure of Wailuku Agribusiness (formerly Wailuku Sugar Company) in 1999. The surrounding area has been urbanized with the Kehalani Master Planned Community, Maui Lani Master Planned Community and church lots and Waikapu Gardens south of the property. The subject property is isolated from the nearest agricultural lands located west of Honoapiilani Highway. In 2016 the last sugar plantation Hawaiian Commercial & Sugar Company also ceased sugar cultivation on Maui opening another 29,000 acres of agricultural lands for other agricultural uses. The removal of approximately 14 acres of agricultural designated land is not anticipated to have an adverse effect on agricultural productivity parameters.

Comment:

3. *"The project also proposes a 3 story garden style architecture which provides a more compact development to house more people on less land but does not compromise the view planes nor over densifies the area thereby also creating efficiencies to conserve precious land and infrastructure on Maui. The project will be designed to be complimentary to the neighboring existing residential developments in Kehalani, Maui Lani and Wailuku Town and help to meet the housing needs of Maui's working families within the Kahului-Wailuku Community Plan District." and "The project designed floor plans and elevations (See Appendix I) are consistent and complimentary to the neighboring residential subdivisions in WaikapūTown." The orientation of this project is geared to an urban use and vision as opposed to what the people of Waikapū consider a part of its community. Up to this point, multi-person structures of this size have been focused on the north side of Kuikahi Drive (Kehalani, etc.) . The project now opens the door to increased density which changes the character of the greater Waikapū area, something the Waikapū Community Association has been watching carefully for many years. We expressed the importance of keeping a clear and separate boundary between Wailuku and Waikapū during the Maui Island Plan process in order to preserve Waikapū's sense of place and character, only to see that hope demolished when the MIP was finally approved. In addition, comparing this project to Waikapū Gardens which built lower than the highway, the view there is obstructed even by those two-story homes. What will a three-story high set of buildings do? Consider the impact of large-scale buildings located close to Kuikahi, Waiale, and Honoapi`ilani roads.*

1500 KILINOE PLACE
WAILUKU. HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Response to comment:

We appreciate your views regarding the separation of Waikapu Town and Wailuku Town. We note that the Maui Island Plan includes the subject property within the Urban Growth Boundary. The subject property is separated from Waikapu by the church lots located south of the property and north of Waikapu Gardens. These lots are zoned P-1 Public/Quasi-Public and are limited to a maximum height of 40 feet. The proposed apartment buildings will have a maximum height not to exceed 40 feet compatible with the adjacent church lots.

In response to your concern regarding the view from Honoapiilani Highway we have requested the architect prepare a view analysis. Similar to the adjacent Kehalani Village Center, the project proposes to grade the property to take advantage of the elevation differences of the property between Honoapiilani Highway and Waiale Road to lower the view of the building from Honoapiilani Highway. The view analysis will be included in the new EA.

Comment:

4. *"There are no anticipated impacts to existing educational facilities or resources." Unrealistic and difficult to predict, based on the experiences of Pomaika`i and Pu`u Kukui campuses.*

Response to comment:

The Department of Education (DOE) provided comments on the Draft EA, which will be included in the new EA to be prepared. The DOE will be contacted to provide additional input on educational facilities within the project area. As advised by the DOE, the applicant will not be seeking any exemptions from the Central Maui School impact fees and will contribute to the required impact fees as a proposed mitigative measure.

Comment:

5. *"Provide four distinct play areas for families on the property totaling 16,823 sf." Unrealistic and demeaning when you consider that the total square footage is no bigger than some of the lots in Wailuku Heights, divided into four areas.*

Response to comment:

The Applicant will provide recreational amenities for the project in the form of the four play areas, as well as a swimming pool, recreation center and barbecue areas. The new EA will evaluate the recreational needs for the project and its impact on recreational resources and propose mitigative measures, as may be appropriate. The Applicant during the new EA process will continue consultation with the Department of Parks and Recreation.

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Comment:

6. *"The site is within walking distance to neighborhood serving amenities." and "create a more walkable environment for the local residents of Wailuku. This allows young families who may purchase a for-sale home be able to visit extended family, like grandparents, that may want to rent in the proposed project to live in the same community by providing different housing choices close to each other. "*

The notion of "walkable communities" is built on a false premise. The fact is that people do not walk in neighborhoods except for people exercising. I travel these roads (Honoapi`ilani, Kuikahi, Waiale, Maui Lani Parkway) multiple times daily. You can count on one hand the number of people "walking" to and from Waikapū Gardens or Kehalani to the Foodland/Long's shopping complex. More people walk from Ka Hale O Ke Ola to the complex than even the closer Kaimana area. At night Kuikahi is not well lit nor are parts of North Waiale which has several crosswalks that are difficult to see. Considering the location of the proposed project, it is dangerous for pedestrians, even with sidewalks and curbs, given the speed cars travel on Kuikahi. I cringe thinking about an apartment resident trying to "chance um" and run across Kuikahi to save time. Installing a crosswalk or a lighted intersection from the project to the Kehalani shopping complex will impede traffic flow. This dilemma must be addressed.

Related to that is the impact of traffic. Regardless what the Austin, Tsutsumi & Associates studies show, those of us who traverse Kuikahi and Waiale and Honoapi`ilani on a regular basis, during peak travel times as well as other times during the day and night, experience the logjam of cars, sometimes beginning at the junction of Kuikahi and Honoapi`ilani east to Waiale. Again, related to the false premise of walkable communities, we know that people will continue to use their cars even to just go to the Kehalani shopping complex and especially in light of the dangers of trying to cross that busy street. The proposed entrance/exit on Kuikahi will dump many more cars onto an already stressed roadway. How do we mitigate this problem?

Residents will also join the line of cars on Maui Lani Parkway during both the week where traffic moving east backs up sometimes almost to Ace Hardware, and on week-ends when hundreds of cars park illegally on the beautiful tree-lined median strip because the huge Maui Lani Park built by the County only has about 20 marked parking spaces to accommodate park users especially during soccer season. Such poor planning.

Response to comment:

"Walkable communities" are being encouraged by the County of Maui and the applicant supports the County's efforts. The applicant will continue to coordinate street improvements for the project with the Department of Public Works to ensure the safety of pedestrians in the area, as well as investigate

measures that promote pedestrian safety. We note that recently the adjoining Kehalani Village Center has constructed new curbs, gutters and sidewalks along their property frontages. The new EA will address pedestrian safety concerns.

Your experience regarding traffic in the area will be forwarded to Austin Tsutsumi & Associates for consideration in the traffic study.

Comment:

7. *"Exempt parking requirement of 2 stalls per unit and allow 1.5 stalls per unit." Parking will become an issue and eyesore in the future. We are married to our cars and the closest Maui Bus stop at this time is near Ka Hale O Ke Ola, quite a distance to walk.*

Response to comment:

The Applicant will review the project plans to determine if additional parking can be provided. This information will be addressed in the new EA.

Comment:

8. *"Exempt the development from the fencing and landscape requirements of MCC 19.36A.070.A.1 beyond those fencing and landscape improvements which are specifically indicated on the proposed site plan. "A sterile, uninviting environment does not encourage people to care about their surroundings. This has been a problem with most major developments including high-end projects (except for resort destinations); minimal trees, minimal foliage; no shade, no ambience...no care.*

Response to comment:

The requested exemption will enable flexibility on the location of trees. A total of 85 shade and other landscape plantings indigenous to the area are proposed within the conceptual landscape planting plan.

Comment:

There are many more items I would like to see addressed including what FACE Maui has expressed regarding the real affordability for Maui's families based on the median income percentages to be used to qualify for the affordable units, as well as availability of water resources; the exemption from the MCC Parks Assessment to reduce costs; and for the Maui County Council to be the decision-making authority for the request to change the state land use boundary and reclassify the approximately 14.416 acres of the property in order to fast-track the project.

BAGOYO
DEVELOPMENT
CONSULTING GROUP

Response to comment:

During preparation of the new EA we will reach out to FACE Maui to obtain their input on the proposed project.

By statutory requirements, the Maui County Council is the authority for the review of State District Boundary amendments involving properties less than 15 acres. The applicant will follow the regulatory process for obtaining this land use amendment and will not be fast tracking the project through this process.

Again, thank you for your comments. Your comments and this response will be included in the new EA to be prepared. If additional clarification is required, please contact me at 808-357-3842.

Sincerely,

V. Bagoyo Development Consulting Group, LLC

1500 KILINOE PLACE
WAILUKU, HI 96793
(808)357-3842
VBAGOYO-DEVGROUP@HAWAII.RR.COM

Attachment "C"

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:
18:DEV/010

January 19, 2018

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku, LLC at Tax Map Key: (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Glenn:

In coordination with the applicant, Legacy Wailuku, LLC, we are requesting withdrawal of the Draft Environmental Assessment (EA) published in the September 23, 2017 Environmental Notice. The applicant will be addressing comments that were expressed during the 30-day comment period on the Draft EA to ensure compliance with content requirements of Chapter 343, Hawai'i Revised Statutes and Title 200 Department of Health, Hawai'i Administrative Rules. A new EA will be prepared and filed with the Office of Environmental Quality Control at a later date.

If additional clarification is required, please contact Ken Takahashi of my office at (808)587-0547.

Very truly yours,

Craig K. Hirai
Executive Director

cc: Linda Schatz
Vince G. Bagoyo, Jr., Bagoyo Development Group
Legacy Wailuku, LLC
Munekiyo Hiraga

PARTIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS

XII

XII. PARTIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS

The following agencies, organizations, and individuals were consulted during preparation of the Draft Environmental Assessment (EA). This Chapter addresses early consultation comments received from these agencies, organizations, and individuals.

FEDERAL AGENCIES

1. Ranae Ganske-Cerizo, Soil Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture
210 Imi Kala Street, Suite 209 Wailuku, Hawai'i 96793-2100

2. Tunis W. McElwain
Chief, Regulatory Branch
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch
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Fort Shafter, Hawai'i 96858-5440

3. Michelle Bogardus
Island Team Leader
U. S. Fish and Wildlife Service
300 Ala Moana Blvd., Rm. 3-122
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STATE AGENCIES

4. Christina Kishimoto, Superintendent
State of Hawai'i
Department of Education
P.O. Box 2360
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5. Virginia "Ginny" Pressler, MD, MBA, FACS, Director
State of Hawai'i
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6. Laura McIntyre, AICP
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7. Suzanne Case, Chairperson
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8. Alan Downer, Administrator
State of Hawai'i
Department of Land and Natural Resources
State Historic Preservation Division
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9. Jade Butay, Interim Director
State of Hawai'i
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10. Vern T. Miyagi, Administrator
Hawai'i Emergency Management
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11. Dr. Kamana'opono Crabbe, Chief Executive Officer
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12. Leo R. Asuncion, Jr., AICP, Director
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Office of Planning
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13. Dan Orodenker, Executive Officer
State of Hawai'i
State Land Use Commission
P.O. Box 2359
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14. Roderick Becker, Comptroller
State of Hawai'i
Department of Accounting and General Services
1151 Punchbowl Street, #426
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15. Luis P. Salaveria, Director
State of Hawai'i
Department of Business, Economic Development & Tourism
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16. Scott Enright, Chair
State of Hawai'i
Department of Agriculture
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17. **State of Hawai'i**
Department of Business, Economic Development & Tourism
Research Division Library
No. 1 Capitol District Building
250 S. Hotel Street, Suite 435
Honolulu, Hawai'i 96813

18. Heidi Meeker
State of Hawai'i
Department of Education
Office of Business Services
c/o Kalani High School
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Honolulu, Hawai'i 96821

19. **State of Hawai'i**
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Honolulu, Hawai'i 96816

20. Lene Ichinotsubo
State of Hawai'i
Department of Health
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21. Alec Wong, P.E., Chief
State of Hawai'i
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Clean Water Branch
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22. **State of Hawai'i**
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23. Patti Kitkowski
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24. Linda Chu Takayama, Director
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25. Barker Farris
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26. Nolan Espinda, Director
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27. Marvin Moniz, District Manager Islands of Maui, Moloka'i, and Lāna'i
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28. Jobie Masagatani, Chair
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Department of Hawaiian Home Lands
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29. Scott Glenn, Director
State of Hawai'i
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawai'i 96813

30. Senator Gil Keith-Agaran
Hawai'i State Senate
Hawai'i State Capitol, Room 221
415 S. Beretania Street
Honolulu, Hawai'i 96813

31. Representative Joseph Souki
House of Representatives
Hawai'i State Capitol, Room 431
415 S. Beretania Street
Honolulu, Hawai'i 96813

COUNTY AGENCIES

32. Stewart Stant, Director
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33. Jeffrey A. Murray, Chief
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34. Carol Reimann, Director
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35. Ka'ala Buenconsejo, Director
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36. William Spence, Director
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37. Tivoli Faaumu, Chief
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38. David Goode, Director
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39. Don Medeiros, Director
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40. David Taylor, Director
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41. Herman Andaya, Interim Emergency Management Officer
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Emergency Management Agency
200 South High Street
Wailuku, Hawai'i 96793

42. Honorable Alika Atay
Maui County Council
200 South High Street
Wailuku, Hawai'i 96793

43. Honorable Michael White, Council Chair
Maui County Council
200 South High Street
Wailuku, Hawai'i 96793

44. Teena Rasmussen
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UTILITIES

45. Michael Grider, Manager, Engineering
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ORGANIZATIONS

46. Albert Perez, Executive Director
Maui Tomorrow
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Wailuku, Hawai'i 96793

47. Donnie McGean
272 Halenani Drive
Wailuku, Hawai'i 96793

48. Richard "Dick" Mayer
1111 Lower Kimo Drive
Kula, Hawai'i 96790

49. Wallette Garcia Pellegrino
1420 Kilohi Street
Wailuku, Hawai'i 96793

50. Rick Papa, President
Attention: Tiana Raymondo
Kehalani Community Association
P.O. Box 1530
Wailuku, Hawai'i 96793

51. Debbie Cabebe, Chief Executive Officer
Maui Economic Opportunity
99 Mahalani Street
Wailuku, Hawai'i 96793

52. Barbara Kojima
Maui Lani Community Association
P. O. Box 1642
Kahului, Hawai'i 96733-1642

53. **University of Hawai'i at Mānoa**
Environmental Center
2500 Dole Street, Krauss Annex 19
Honolulu, Hawai'i 96822

54. Reid Kawabata
Waikapu Community Association
P.O. Box 3046
Wailuku, Hawai'i 96793

55. Glenn Adolpho
Waikapu Gardens Homeowners Association
P. O. Box 2390
Wailuku, Hawai'i 96793

56. **Wailuku Community Association**
40 Hoauna Street
Wailuku, Hawai'i 96793

57. **Wailuku Heights Extension Unit I Community Association**
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Wailuku, Hawai'i 96793

58. Lester Yano
Wailuku Heights Extension Unit II Community Association
c/o Hawaiiana Management Company Ltd.
140 Hoohana Street, Ste 208
Kahului, Hawai'i 96732

59. **FACE MAUI**
Father Terry Watanabe, President
25 Lipoa Street
Kīhei, Hawai'i 96753

60. Jayne Kinoshita
Email: jkskinos@gmail.com

61. Ernest Grace
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62. John and Janice Francis
531 Polulani Drive
Wailuku, Hawai'i 96793

63. Elaine Fujita
Email: gfmaui50@hotmail.com

64. Bob and Debby Takahashi
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FEB 2 3 2018

DAVID Y. IGE
GOVERNOR

RODERICK K. BECKER
Comptroller

AUDREY HIDANO
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)1043.8

FEB 2 1 2018

Ms. Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Early Consultation Request for Proposed Section 201-H, Hawaii Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK: (2) 3-5-001:064 Wailuku, Maui, Hawaii

Thank you for the opportunity to comment on the subject project. We have no comments to offer at this time as the proposed project does not impact any of the Department of Accounting and General Services' projects or existing facilities.

If you have any questions, please have your staff call Ms. Dora Choy of the Planning Branch at 586-0488.

Sincerely,

RODERICK K. BECKER
Comptroller

c: Mr. Wade Shimabukuro, DAGS MDO

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Roderick K. Becker, Comptroller
State of Hawai'i
Department of Accounting and General Services
P.O. Box 1199
Honolulu, Hawai'i 96810-0119

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i ((P)1043.8)

Dear Mr. Becker:

Thank you for your letter, dated February 21, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we acknowledge that your department does not have any comments at this time.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letter and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:la
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Agency Response\DAGS.doc

DAVID Y. IGE
GOVERNOR

FEB 12 2018

DR. CHRISTINA M. KISHIMOTO
SUPERINTENDENT

STATE OF HAWAI`I

DEPARTMENT OF EDUCATION

P.O. BOX 2360

HONOLULU, HAWAI`I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

February 9, 2018

Ms. Colleen Suyama
Munekiyo Hiraga
305 High Street
Wailuku, Hawaii 96793

Re: Early Consultation Request Letter for a Draft Environmental Assessment for the Proposed Affordable Housing Project by Legacy Wailuku, LLC Wailuku, Maui, Hawaii, TMK: 3-5-001:064

Dear Ms. Suyama:

The Department of Education (DOE) has the following comments on the Early Consultation Request Letter for the Draft Environmental Assessment (DEA) for the proposed Wailuku Affordable Housing Project by Legacy Wailuku, LLC (Project). According to the information provided, the proposed Project will utilize Section 201-H, Hawaii Revised Statutes (HRS), for the development of 324 rental apartments comprised of 195 affordable units and 129 market rate units ranging in size from studio to three-bedroom units located at Wailuku, Maui, Hawaii, TMK: 3-5-001:064.

The previous DEA prepared for this Project by the Bagoyo Development Group and published in the September 23, 2017 Environmental Notice of the Office of Environmental Quality Control was withdrawn by the Hawaii Housing Finance and Development Corporation via letter dated January 19, 2018. The DOE previously provided comments on this Project to the Bagoyo Development Group by letter dated October 18, 2017. These comments are included in the current Early Consultation Request Letter.

When the Project is mature and unit turnover is stabilized, we would expect roughly 71 DOE students will reside there.

The DOE schools currently serving the proposed project are Puu Kukui Elementary, Maui Waena Intermediate, and Maui High School. Puu Kukui Elementary is currently over capacity by approximately 100 students. This over capacity condition is expected to remain over the next five years. Maui Waena Intermediate is over capacity by approximately 250 students. This over capacity condition is expected to remain over the next five years. Maui High School is over capacity by approximately 300 students. This over capacity condition is expected to increase to approximately 400 students over the next five years.

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

The proposed Project is located within the Central Maui School Impact Fee District (District). This District and impact fee amounts were adopted by the Board of Education on November 18, 2010. The Project is located in the Wailuku Cost Area in which fee amounts are $5,373 for single-family units and $2,371 for multi-family units. Chapter 302A-1606, HRS, requires that residential units with 50 or more units execute an agreement with the DOE. Legacy Wailuku, LLC is encouraged to meet with the DOE as early as possible to execute an Educational Contribution Agreement.

Thank you for the opportunity to comment. Should you have any questions, please contact Robyn Loudermilk of the Planning Section, Facilities Development Branch, at (808) 784-5093.

Respectfully,

Kenneth G. Masden, II
Public Works Manager
Planning Section

KGM:jmb

c: Kathleen Dimino, Complex Area Superintendent, Baldwin-Kekaulike-Maui Complex

DAVID Y. IGE
GOVERNOR

DR. CHRISTINA M. KISHIMOTO
SUPERINTENDENT

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI'I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

October 18, 2017

Mr. Vince Bagoyo
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo

Re: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project, Waiale Road, Wailuku, Maui, Hawaii - TMK: (2)3-5-001:064

The Department of Education (DOE) has reviewed the Draft Environmental Assessment (DEA) for the proposed Wailuku Apartment Rental Housing Project (Project) and would like to offer a few important comments.

Page 5 of the DEA states, "The Applicant, in coordination with HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes." The DOE has determined that that the Project is located within the Central Maui School Impact District which was designated by the Board of Education on November 18, 2010 pursuant to Chapter 302A-1604, Hawaii Revised Statutes (HRS).

The DOE would like to clarify that except as permitted by HRS Chapter 302A-1603, the Project will not be exempted from school impact fees. A portion of this section of statute was recently amended to read as follows: "(a) Except as provided in subsection (b), any person who seeks to develop a new residential development within a designated school impact district requiring: (1) A county subdivision approval; (2) A county building permit; or (3) A condominium property regime approval for the project, shall be required to fulfill the land component impact fee or fee in lieu requirement and construction cost component impact fee requirement of the department, including all government housing projects and projects processed pursuant to sections 46-15.1 and 201H-38."

The Applicant is encouraged to contact Heidi Meeker, of the Department of Education Facilities Development Branch, at 784-5095 to discuss the negotiation of an Educational Contribution Agreement wherein specific terms and conditions of school impact fees will be documented.

We would also like to offer a correction to Page 37 where the 2015 enrollment for Maui Waena Intermediate School is noted as 1043. The DOE's official enrollment for the 2015 school year at Maui Waena Intermediate School is 1143.

If you have any questions, please call Roy Ikeda of the Facilities Development Branch at 784-5094.

Respectfully,

Kenneth G. Masden II
Public Works Manager
Planning Section

KGM:jmb

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Kenneth G. Masden, II
Public Works Manager
Planning Section
Department of Education
P.O. Box 2360
Honolulu, Hawai'i 96804

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Masden:

Thank you for your letter dated February 9, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information.

Your previous comment letter dated October 18, 2017, has been included in the Draft EA. In response to your previous comments, current enrollment information from the 2017 to 2018 school year has been obtained from the Department of Education's (DOE) website and has been included in the Draft EA. Further, Legacy Wailuku LLC is aware of the requirements of the Central Maui School Impact Fee District.

The Draft EA will include information provided by the DOE that the project will generate approximately 71 students who are expected to reside in the project. We understand that the schools that serve the proposed project are Pu'u Kukui Elementary, Maui Waena Intermediate and Maui High School. The Draft EA will note that these schools are over capacity and that this overcapacity condition for Maui High School is expected to increase by approximately 400 students over the next five (5) years.

We acknowledge the project is located within the Central Maui School Impact Fee District and is subject to the school impact fee for multi-family units and that an Educational Contribution Agreement with the DOE is required. As such, Legacy Wailuku, LLC will make arrangements to meet with the DOE to discuss this matter further.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Agency Response\DOE.PlannSec.doc

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
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

February 26, 2018

Munekiyo & Hiraga, Inc.
Attention: Ms. Colleen Suyama
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: colleen@munekiyohiraga.com

Dear Ms. Suyama:

SUBJECT: Early Consultation Request for the Proposed **Wailuku Affordable Housing Project** located at Wailuku, Maui; TMK: (2) 3-5-001:064

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) Engineering Division and (b) Land Division – Maui District on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at (808) 587-0417. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosures
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

'18FEB 5 AM10:30 ENGINEERING

SUZANNE D. CASE
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

February 5, 2018

MEMORANDUM

RECEIVED
LAND DIVISION
2018 FEB 13 P 1:58
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
X Engineering Division
___Div. of Forestry & Wildlife
___Div. of State Parks
X Commission on Water Resource Management
___Office of Conservation & Coastal Lands
X Land Division – Maui District
X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Early Consultation Request for the Proposed **Wailuku Affordable Housing Project**
LOCATION: Wailuku, Island of Maui; TMK: (2) 3-5-001:064
APPLICANT: Munekiyo Hiraga on behalf of Legacy Wailuku, LLC

Transmitted for your review and comment is information on the above-referenced subject matter. We would appreciate your comments by **February 21, 2018.**

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 Darlene Nakamura at 587-0417. Thank you.

additional

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

Signed: _____

Print Name: Carty S. Chang, Chief Engineer

Date: 2/9/18

Attachments
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
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
LAND DIVISION
2018 FEB 22 A 9:30
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE OF HAWAII

February 5, 2018

MEMORANDUM

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
_X_Engineering Division
___Div. of Forestry & Wildlife
___Div. of State Parks
_X_Commission on Water Resource Management
___Office of Conservation & Coastal Lands
_X_Land Division – Maui District
_X_Historic Preservation

RECEIVED
2018 FEB -7 A 11:41
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Early Consultation Request for the Proposed **Wailuku Affordable Housing Project**
LOCATION: Wailuku, Island of Maui; TMK: (2) 3-5-001:064
APPLICANT: Munekiyo Hiraga on behalf of Legacy Wailuku, LLC

Transmitted for your review and comment is information on the above-referenced subject matter. We would appreciate your comments by **February 21, 2018.**

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 Darlene Nakamura at 587-0417. Thank you.

( ) We have no objections.
(X) We have no comments.
( ) Comments are attached.

Signed: [signature]

Print Name: Daniel Ornellas

Date: 2/20/18

Attachments
cc: Central Files

ds 2/7/18
ss 2/7/18

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Russell Y. Tsuji
Land Administrator
Land Division
Department of Land and
Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Tsuji:

Thank you for your letter dated February 26, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we acknowledge that your department's Engineering Division and Land Division-Maui Office do not have any comments at this time.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letter and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808)244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Agency Response\DLNR.doc

FEB 12 2018

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
EMD/CWB

02004PSS.18

February 6, 2018

Ms. Colleen Suyama
Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: Early Consultation Request for Proposed Section 201-H, Hawaii Revised Statutes (HRS)
Wailuku Affordable Housing Project by Legacy Wailuku, LLC
TMK: (2)3-5-001:064
Wailuku, Island of Maui, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated January 26, 2018, requesting comments on the subject project. The DOH-CWB has reviewed the subject document and offers these comments. 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. Legacy Wailuku, LLC (Applicant) may be responsible for fulfilling additional requirements related to our program. We recommend that they also read our standard comments on our website at:
http://health.hawaii.gov/epo/files/2013/05/Clean-Water-Branch-Std-Comments.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. The Applicant may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55).

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, your Applicant must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee ($1,000 for an individual NPDES permit or $500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/. They will be asked to do a one-time registration to obtain their login and password. After they register, click on the Application Finder tool and locate the appropriate form. They can then follow the instructions to complete and submit the form.

3. If your Applicant's project involves work in, over, or under waters of the United States, it is highly recommended that they contact the Army Corp of Engineers, Regulatory Branch (Tel: 835-4303) regarding their permitting requirements.

   Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and HAR, Chapter 11-54.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC 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.

5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:

   a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project planning must recognize storm water as an asset that sustains and protects natural ecosystems and traditional beneficial uses of State waters, like

community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.

b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g., minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.

c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.

d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.

e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Particular consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

If you have any questions, please visit our website at: http://health.hawaii.gov/cwb, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

Alec Wong

ALEC WONG, P.E., CHIEF
Clean Water Branch

SS

c: Ms. Colleen Suyama, Munekiyo Hiraga
[via e-mail colleen@munekiyohiraga.com only]
DOH-EPO [via e-mail only]

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Alec Wong, P.E., Chief
Clean Water Branch
Department of Health
P.O. Box 3378
Honolulu, Hawai'i. 96801-3378

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i (02004PSS.18)

Dear Mr. Wong:

Thank you for your letter of February 6, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information, which addresses your comments in the order listed in your letter.

1. We acknowledge that the project must meet the Department of Health (DOH) water quality requirements of Hawai'i Administrative Rules (HAR), Chapter 11-54.

2. As may be required, a National Pollutant Discharge Elimination System (NPDES) permit will be submitted to the DOH for approval prior to the initiation of construction.

3. We acknowledge that work in, over, or under waters of the United States may require additional permitting from the Army Corps of Engineers (ACE), Regulatory Branch.

4. We acknowledge the project must comply with the State's Water Quality Standards and non-compliance may be subject to penalties of $25,000.00 per day per violation.

5. We acknowledge that the project must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. As such, the recommendations of the DOH has been forwarded to the design consultant.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letter and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
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FEB 12 2018

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

LORRIN W. PANG, M.D., M.P.H.
DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, HAWAII 96793-3378

February 8, 2018

Ms. Colleen Suyama
Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Early Consultation Request for Proposed Section 201-H, Hawaii Revised Statues (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2) 3-5-001:064, Wailuku, Maui, Hawaii

Thank you for the opportunity to review this project. We have the following comments to offer:

1. The noise created during the construction phase of the project may exceed the maximum allowable levels as set forth in Hawaii Administrative Rules, Chapter 11-46, "Community Noise Control." A noise permit may be required and should be obtained before the commencement of work. Please call the Indoor & Radiological Health Branch at 808 586-4700.

2. Please provide wastewater disposal method for the proposed project.

3. The land was formerly used in the production of sugarcane and/or pineapple. Please contact the Department of Health, Hazard Evaluation and Emergency Response Office at 808 586-4249.

It is strongly recommended that the Standard Comments found at the Department's website: http://health.hawaii.gov/epo/home/landuse-planning-review-program/ be reviewed and any comments specifically applicable to this project should be adhered to.

Should you have any questions, please contact me at 808 984-8230 or email me at patricia.kitkowski@doh.hawaii.gov.

Sincerely,

Patti Kitkowski
District Environmental Health Program Chief

c EPO

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Patti Kitkowski
District Environmental Health Program Chief
Department of Health
Maui District Health Office
54 High Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Kitkowski:

Thank you for your letter of February 8, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information, which addresses your comments in the order listed in your letter.

1. We acknowledge the project is subject to the requirements of Hawai'i Administrative Rules, Chapter 11-46, "Community Noise Control". As may be required, a noise permit will be obtained prior to the commencement of work.

2. The project proposes to connect to existing sewer lines in Wai'ale Road that transport sewage to the County of Maui Wailuku-Kahului Wastewater Reclamation Facility.

3. Applicable coordination will be undertaken with the Department of Health (DOH), Hazard Evaluation and Emergency Response Office.

Also, as recommended the website of the standard comments of the DOH has been forwarded to the engineering consultant for the project.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letter will be included in the Draft EA. As well as, a copy of the Draft EA will be sent to your office for review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Agency Response\DOH.Maui.doc

FEB 20 2018

DAVID Y. IGE
GOVERNOR
STATE OF HAWAII

DOUGLAS S. CHIN
LT. GOVERNOR
STATE OF HAWAII

JOBIE M. K. MASAGATANI
CHAIRMAN
HAWAIIAN HOMES COMMISSION

WILLIAM J. AILA, JR.
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
160 BAKER AVENUE
HILO, HAWAII 96720

February 14, 2017

Attention: Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai`i 96793

Dear Ms. Suyama:

Subject: Early Consultation Request for Proposed Section 201-H, Hawai`i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai`i

The Department of Hawaiian Home Lands (the "Department") acknowledges receiving the request for comments on the above-cited project. After reviewing the materials submitted, due to its lack of proximity to Hawaiian Home Lands, we do not anticipate any impacts to our lands or beneficiaries from the project. However, we would like to provide the following comments:

1. The Department's Wai`ehu Kou-Paukūkalo Regional Plan identifies priority projects that align with the proposed Wailuku Affordable Housing Project.

   Multiple priority projects speak to the importance of a community center. In the development of the Wailuku Affordable Housing Project, we ask that you consider including a community center as part of the project.

   Also related to a priority project, we also ask that you account for transportation needs and traffic congestion that will result from the construction and establishment of the Wailuku Affordable Housing Project.

For more information, see the Wai`ehu Kou-Paukūkalo Regional Plan here: http://dhhl.hawaii.gov/wp-content/uploads/2011/06/Waiehu-Kou-Paukukalo-Regional-Plan.pdf

2. Consult with Hawaiian Homestead Community Associations and other (N)native Hawaiian Organizations.

We highly encourage all agencies to consult with Hawaiian Homestead community associations and other (N)native Hawaiian organizations to gather additional information and to better assess potential impacts to cultural and natural resources, access and other rights of Native Hawaiians.

Mahalo for the opportunity to provide comments. If you have any questions, please call Julie-Ann Cachola, at 620-9483 or contact via email at julie-ann.cachola@hawaii.gov.

Sincerely,

M. Kaleo Manuel
Acting Planning Program Manager

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

M. Kaleo Manuel
Acting Planning Program Manager
Department of Hawaiian Home Lands
State of Hawaii
160 Baker Avenue
Hilo, Hawai'i 96720

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Manuel:

Thank you for your letter dated February 14, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we appreciate your comments regarding the importance of a community center as part of the project and your encouragement to consult with the Hawaiian communities. The project proposes to include a community center/leasing office building within the project as a meeting place for the tenants of the project. Also, a swimming pool and four (4) play areas and barbecue area are being provided for the tenants.

Additionally, a Traffic Impact Assessment Report (TIAR) is being prepared and will be included in the Draft EA to address traffic congestion concerns.

Legacy Wailuku, LLC has been engaged in meeting with the surrounding communities some of which include native Hawaiian residents. Due to the project location being quite a distance from the nearest Hawaiian Homestead community located at Wai'ehu Kou and Paukūkalo the community associations were not contacted. However, a copy of the Draft EA will be provided to the leadership of the respective DHHL homestead community associations. We will coordinate with your Maui district office to obtain contact information.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letter and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
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SIP (18-016)
02/28/18 gm

DAVID Y. IGE
GOVERNOR

JADE T. BUTAY
INTERIM DIRECTOR

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

IN REPLY REFER TO:
DIR 0130
STP 8.2337

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

February 27, 2018

Ms. Colleen Suyama
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Wailuku Affordable Housing Project, Section 201H
Early Consultation for Draft Environmental Assessment (DEA)
Wailuku, Maui, Hawaii
TMK: (2) 3-5-001:064

The Department of Transportation (DOT) comments are as follows:

Airports Division

1. The proposed project site is located approximately four miles from Runway 2 of the Kahului Airport (OGG). Any proposed development within five miles of an airport is subject to the State of Hawaii, Office of Planning, Technical Assistance Memorandum.

   You can find out more details through the following link:
   http://files.hawaii.gov/dbedt/op/docs/TAM-FAA-DOT-Airports_08-01-2016.pdf.

   If any of the project features attract hazardous wildlife, create glint and glare hazard, or create an aerial obstruction hazard to flight operations, the Applicant/Property Owner must coordinate with proper officials and agencies and must implement appropriate mitigation to address the hazards.

2. Standing water in the existing open drainage channel shall be eliminated and water must be drained or pumped out within 48 hours of peak weather events to eliminate potential hazardous wildlife attractants that may impact aircraft operations at OGG.

   It is strongly recommended that you consult the Federal Aviation Administration Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports* for guidance.

3. The project is located outside of the 55 DNL (day-night average noise level) contours as shown on the Five-Year (1998) No Mitigation Noise Exposure Map for Kahului Airport.

   The Applicant and future residents should be aware of the proximity of the airport and the potential of single event noise from aircraft operations.

Highways Division

1. A traffic study should be prepared by a traffic engineer licensed in the State of Hawaii and should be included in the DEA.

   a. The traffic study should evaluate any local impacts to the Honoapiilani Highway and nearby State facilities attributed to the project.

   b. An evaluation should be included for regional traffic impacts of the proposed project and potential fair share contribution to traffic improvements.

If there are any questions, please contact Mr. Blayne Nikaido of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7979.

Sincerely,

JADE T. BUTAY
Interim Director of Transportation

BN:gm

bc: AIR-EP, HWY-PS (2018-027), STP (18-016)

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Jade T. Butay, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawai'i 96813-5097

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK(2)3-5-001:064, Wailuku, Maui, Hawai'i (DIR 0130, STP 8.2337)

Dear Mr. Butay:

Thank you for your letter, dated February 27, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing project indicating your Department has no additional comments. On behalf of Legacy Wailuku, LLC, we offer the following information.

Airports Division

1. We acknowledge the project site is located approximately four (4) miles from Runway 2 of the Kahului Airport and is subject to the State of Hawai'i, Office of Planning, Technical Assistance Memorandum. A copy of the Memorandum has been forwarded to the applicant.

2. The existing open drainage channel conveys stormwater runoff to a detention basin in Waikapū and is not expected to contain standing water. However, should there be any standing water, within 48 hours the water will dissipate.

3. We acknowledge the project site is located outside the 55 DNL contours of the Kahului Airport. However, the applicant has been advised of the proximity of the airport and the potential of single event noise from aircraft operations.

Highways Division

1. A traffic study is being prepared and will be included in the Draft EA.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letter and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:tn
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
Tyler Fujiwara, Austin Tsutsumi & Associates, Inc.
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DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
HOUSING DIVISION
COUNTY OF MAUI

ALAN M. ARAKAWA
Mayor
CAROL K. REIMANN
Director
JAN SHISHIDO
Deputy Director

35 LUNALILO STREET, SUITE 102 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7351 • FAX (808) 270-6284

FEB 15 2018

February 9, 2018

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Early Consultation Request for the Proposed Section 201-H, Hawaii Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2) 3-5-001:064, Wailuku, Maui, Hawaii.

The Department has reviewed the request for Early Consultation for the above subject project. Based on our review, we have determined that the project is subject to Chapter 2.96, Maui County Code, and must comply with all applicable regulations.

Please feel free to contact me at (808) 270-7355 if you have any questions.

Sincerely,

C. BUDDY ALMEIDA
Housing Administrator

cc: Director of Housing and Human Concerns

DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

ALAN M. ARAKAWA
Mayor
CAROL K. REIMANN
Director
JAN SHISHIDO
Deputy Director

2200 MAIN STREET • SUITE 546 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7805 • FAX (808) 270-7165
MAILING ADDRESS: 200 SOUTH HIGH STREET • WAILUKU, HAWAII 96793 • EMAIL: director.hhc@mauicounty.gov

November 15, 2017

Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE WAILUKU APARTMENTS RENTAL HOUSING PROJECT
TMK (2) 3-5-001:064

The Department of Housing and Human Concerns has reviewed the Draft Environmental Assessment (DEA) Report for the Wailuku Apartments Rental Housing Project 201H Application.

The Department's review, per Chapter 343, does not note any environmental impacts relating to the project.

Please note the Department's comments are not meant to be a FONSI under Chapter 343, and the Department is not reviewing the EA or the 201H application as it is under the jurisdiction of HHFDC.

Sincerely,

CAROL K. REIMANN
Director of Housing and Human Concerns

xc: Linda Schatz, Schatz Collaborative LLC
Buddy Almeida, Housing Administrator

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Carol Reimann, Director
Department of Housing and
Human Concerns
County of Maui
One Main Plaza, Suite 546
2200 Main Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Reimann:

Thank you for your letter dated February 9, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information.

Your previous comment letter dated November 15, 2017, will be included in the Draft EA and we acknowledge your Department did not note any environmental impacts relating to the project.

We also acknowledge the Wailuku Apartment Rental Housing Project is subject to Chapter 2.96, Maui County Code, and will comply with the applicable regulations.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. Copies of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
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ALAN M. ARAKAWA
Mayor

KA'ALA BUENCONSEJO
Director

BRIANNE L. SAVAGE
Deputy Director

FEB 15 2018

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

(808) 270-7230
FAX (808) 270-7934

February 8, 2018

Ms. Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: EARLY CONSULTATION REQUEST FOR PROPOSED SECTION 201-H, HAWAII REVISED STATUTES (HRS), WAILUKU AFFORDABLE HOUSING PROJECT BY LEGACY GROUP, LLC AT TMK: (2) 3-5-001:064, WAILUKU, MAUI, HAWAII

Thank you for the opportunity to review the subject project. The Department of Parks and Recreation (DPR) does not have any comments to offer at this time regarding the project.

Once DPR is provided with a copy of the fully executed 201H HRS affordable housing agreement with the Department of Housing and Human Concerns, we can approve exemption from Maui County Code Section 18.16.320 Parks and Playgrounds.

Should you have any questions or concerns, please feel free to call me, or Robert Halvorson, Chief of Planning and Development, at 270-7931.

Sincerely,

KA'ALA BUENCONSEJO
Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning and Development

KB:RH

ALAN M. ARAKAWA
Mayor

KA'ALA BUENCONSEJO
Director

BRIANNE L. SAVAGE
Deputy Director

(808) 270-7230
FAX (808) 270-7934

DEPARTMENT OF PARKS & RECREATION
700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

October 20, 2017

Mr. Vince Bagoyo, Project Consultant
1500 Kilinoe Pl.
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT AND ANTICIPATED FINDINGS OF NO SIGNIFICANT IMPACT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT, LOCATED AT TMK: (2) 3-5-001:064, WAIALE ROAD, WAILUKU, MAUI, HAWAII

Thank you for the opportunity to review and comment on the subject project. The Department of Parks and Recreation (DPR) does not have any comments or objections to the project. Once the applicant provides DPR with a copy of the fully executed 201H HRS affordable housing agreement with the Department of Housing and Human Concerns, DPR will provide exemption from Maui County Code Section 18.16.320 Parks and Playgrounds.

Should you have any questions or concerns, please feel free to call me, or Robert Halvorson, Chief of Planning and Development, at 270-7931.

Sincerely,

KA'ALA BUENCONSEJO
Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning and Development

KB:RH:csa

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Ka'ala Buenconsejo, Director
Department of Parks and Recreation
County of Maui
700 Hali'a Nakoa Street, Unit 2
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Buenconsejo:

Thank you for your letter dated February 8, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information.

Your previous comment letter dated October 20, 2017, will be included in the Draft EA and we acknowledge your Department did not have any comments or objections to the project.

We acknowledge that once the Section 201H-38, Hawai'i Revised Statutes (HRS), approval is granted, that the Department of Parks and Recreation will be able to approve an exemption from Maui County Code Section 18.16.320 Parks and Playgrounds.

Again, thank you for your participation in the Chapter 343, HRS review process. Copies of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

FEB 20 2018

COUNTY OF MAUI

DEPARTMENT OF PLANNING

February 16, 2018

Ms. Colleen Suyama
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: RESPONSE TO EARLY CONSULTATION REQUEST FOR PROPOSED SECTION 201-H, HAWAII REVISED STATUTES (HRS) WAILUKU AFFORDABLE HOUSING PROJECT, WAILUKU, ISLAND OF MAUI, HAWAII; TMK: (2) 3-5-001:064 (RFC 2018/0014)

The Department of Planning (Department) is in receipt of the above-referenced early consultation request for the proposed Wailuku Affordable Housing Project. The Department understands that the plan has not changed since originally proposed for the Draft Environmental Assessment (EA), which was withdrawn by Hawaii Housing Finance and Development Corporation (HHFDC) by letter dated January 19, 2018. The Department notes that you have received our letter dated November 3, 2017, which was sent to the Applicant. We also submitted another letter dated November 8, 2017, which we are attaching for your information. We just ask that our comments are included and addressed in the application submittal.

Thank you for the opportunity to comment. Please include the Department on the distribution list for the new Draft EA. Should you require further clarification, please contact Staff Planner Tara Furukawa by email at tara.furukawa@mauicounty.gov or by phone at (808) 270-7520.

Sincerely,

WILLIAM SPENCE
Planning Director

Attachment
xc: Clayton I. Yoshida, Planning Program Administrator (PDF)
John S. Rapacz, Planning Program Administrator (PDF)
Pam Eaton, Planning Program Administrator (PDF)
Tara K. Furukawa, Staff Planner (PDF)
Paul Critchlow, Staff Planner (PDF)
Garrett Smith, Staff Planner (PDF)
Project File
WRS:TKF:lak
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI

DEPARTMENT OF PLANNING

November 3, 2017

Mr. Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT, WAILUKU, ISLAND OF MAUI, HAWAII; TMK: (2) 3-5-001:064 (RFC 2017/0096)

The Department of Planning (Department) is in receipt of the above-referenced document for the proposed Wailuku Apartment Rental Housing Project. The Department understands that the proposed action involves development of approximately 324 apartments of which 60 percent will be affordable and 40 percent will be market rate units. The proposed units will consist of studio, one-bedroom, two-bedroom and three-bedroom units with floor areas ranging from approximately 400-950 square feet. The project will include amenities that will include four (4) play areas, a recreation center, swimming pool, barbecue area and leasing office areas. Based on the foregoing, the Department provides the following comments in preparation of the Final EA.

1. On the Zoning and Flood Confirmation Form, the Community Plan designation says that it's "Future Growth Reserve"; however, on page 7, in the "Existing Land Use Designations" portion, it says the Community Plan designation is "Agriculture." Also, throughout the document, it references the Community Plan as being "Agriculture." For the Final EA, please include the correct designation and discussion.

2. In the Scenic and Open Space Resources section, it says the property has partial views of east Maui and Haleakala; but yet the project is not part of a scenic corridor. To mitigate any view impact, the buildings will be set at lower elevations. Because the buildings are proposed to be three-story structures and the average slope from Honoapiilani Highway is slight at about 5%, it would be beneficial to see a view analysis. For the Final EA, please provide a "before" and "after" view analysis from publicly accessible vantage points along Honoapiilani Highway.

3. On page 34, under the "Economy" section, there is a paragraph about the Kihei-Makena Community Plan region. Please replace this with information on the Wailuku-Kahului Community Plan region, since this project is proposed for Wailuku.

4. On page 37, it says the proposed action is not a population generator that will increase population parameters within the Kahului-." While this may be true, it will still draw families who are currently living in other areas on Maui; hence, there will still be an impact on the State Department of Education (DOE) schools that service the region. For the Final EA, we recommend coordination with the Maui DOE to ensure that there is sufficient space and/or to fulfill fair share contribution requirements.

5. Four (4) parks are currently being proposed. There are no proposed park concepts. We recommend coordination with the County of Maui Parks and Recreation Department to determine park needs, any dedication requirements, if that is being planned, or any fair share contribution requirements. Please also provide park plans/renderings for the Final EA.

6. A preliminary landscape plan was provided and it was in color; however, there were no colored renderings of the buildings included in the Draft EA. For the Final EA, please provide colored renderings so that it would be possible to envision what the project will look like once built. Will the buildings be a specific color so as to blend in with the surrounding landscape?

7. On page 71, in the "Alternatives to the Proposed Action" section, there are alternatives for what is currently being proposed, an agriculture subdivision and what will happen if there is no action. There are no alternative density options. Currently, 324 units are being proposed and the proposed structures will be three-story. Exemptions are being sought for the two (2) space parking requirement so that 1.5 spaces can be provided. Because the units will be affordable, there will be families interested in renting the units, and they may have multiple cars. Perhaps if less units were offered, the Applicant can still provide a number of affordable rentals, as well as meet the two (2) stall minimum requirement. Another exemption is being sought to the A-2 Apartment District Building Height Definition 19.04.040. If other lower density options are considered, such as two-story structures, perhaps the exemption would be unnecessary. Can you please include a lower density options into the analysis?

Thank you for the opportunity to comment. Please include the Department on the distribution list for the Final EA.

Should you require further clarification, please contact Staff Planner Tara Furukawa by email at tara.furukawa@mauicounty.gov or by phone at (808) 270-7520.

Sincerely,

WILLIAM SPENCE
Planning Director

xc: Clayton I. Yoshida, Planning Program Administrator (PDF)
John S. Rapacz, Planning Program Administrator (PDF)
Tara K. Furukawa, Staff Planner (PDF)
Project File
General File

WRS:TKF:ela
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI

DEPARTMENT OF PLANNING

November 8, 2017

Mr. Vince Bagoyo
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: COMMENTS ON DISTRICT BOUNDARY AMENDMENT (DBA) PROCESSING AND PROCEDURAL ISSUES FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT, WAILUKU, ISLAND OF MAUI, HAWAII; TMK: (2) 3-5-001:064 (RFC 2017/0096)

The Department of Planning (Department) is in receipt of a question regarding procedural matters for the processing of a District Boundary Amendment for the Wailuku Apartment Rental Housing Project located on approximately 14.416 acres. The Department has no objection with the Applicant proceeding directly to the Maui County Council for review of this 201H Project District Boundary Application, and seeking an exemption from the procedural processing requirements of a District Boundary Amendment Application under 15 acres.

Thank you for the opportunity to comment. Should you require further clarification, please contact Staff Planners Kurt Wollenhaupt by email at kurt.wollenhaupt@mauicounty.gov or Tara Furukawa by email at tara.furukawa@mauicounty.gov or by phone at (808) 270-8205.

Sincerely,

WILLIAM SPENCE
Planning Director

xc: Michele Chouteau McLean, Deputy Director (PDF)
Clayton I. Yoshida, Planning Program Administrator (PDF)
John S. Rapacz, Planning Program Administrator (PDF)
Tara K. Furukawa, Staff Planner (PDF)
Kurt F. Wollenhaupt, Staff Planner (PDF)
Vince Bagoyo (PDF)
Project File
General File

WRS:KFW:lak
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MUNEKIYO HIRAGA
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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

William Spence, Director
Department of Planning
County of Maui
One Main Plaza
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Spence:

Thank you for your letter dated February 16, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we acknowledge receipt of your previous letters dated November 3, 2017 and November 8, 2017 responding to the Draft EA published in the September 23, 2017 Environmental Notice. Although this Draft EA has been withdrawn please be advised that your comments will be included and addressed in the new Draft EA.

We also acknowledge that your Department does not object to the Section 201H-38 application proceeding directly to the Maui County Council for a State District Boundary Amendment under 15 acres.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. Copies of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
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ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

MAR 0 1 2018

GLEN A. UENO, P.E., P.L.S.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

JOHN R. SMITH, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

February 22, 2018

Ms. Colleen Suyama, Senior Associate
MUNEKIYO HIRAGA
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: EARLY CONSULTATION FOR PROPOSED SECTION 201-H WAILUKU AFFORDABLE HOUSING PROJECT TMK: (2) 3-5-001:064

We reviewed your early consultation request and have no additional comments at this time. Please refer to our comments provided to the applicant on November 9, 2017.

If you have any questions regarding this memorandum, please call Rowena Dagdag-Andaya at 270-7845.

Sincerely,

DAVID C. GOODE
Director of Public Works

DCG:RMDA:da
xc: Engineering Division
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ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

GLEN A. UENO, P.E., P.L.S.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

JOHN R. SMITH, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

November 9, 2017

Mr. Vince Bagoyo
BAGOYO DEVELOPMENT CONSULTING GROUP
1500 Kilinoe Place
Wailuku, Maui, Hawaii 96793

Dear Mr. Bagoyo:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT AND ANTICIPATED FINDINGS OF NO SIGNIFICANT IMPACT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT TMK: (2) 3-5-001:064, WAIALE ROAD, WAILUKU, MAUI, HAWAII

We reviewed the subject application and have the following comments:

Comments from the Highways Division:

1. Page 81, Summary of Exemptions, No. 9 –Vertical concrete curb/gutter and sidewalks will provide a safer, longer term walkable environment to nearby local establishments. We do not recommend the requested exemption for asphalt curb and sidewalk, and grassed swale along Waiale Drive, and no sidewalk along Kuikahi Drive (Figure 2-2). Onsite sidewalk plan does not appear to provide residents a directed route avoiding Kuikahi Drive shoulder (page 97). Drainage improvements along Kuikahi Drive and Waiale Road frontages should be considered similar to the improvements currently being constructed across the street along Kuikahi Drive.

2. Page 82, Summary of Exemptions, No. 11 – Street lighting will provide a safer walkable environment to nearby local establishments. We do not recommend the requested exemptions from street lighting.

3. Page 84, Summary of Exemptions, No. 12 – Non-conformance with the County's Municipal Separate Storm Sewer System (MS4) guidelines may

put the County at risk of non-compliance. We do not recommend the requested exemption to push compliance onto downstream facilities.

4. Page 86, Summary of Exemptions, No. 17 – See comments on exemption No. 9 above.

Comments from the Engineering Division:

1. Page 78, Summary of Exemptions, No. 3 - The Department is unsure of the exemption being requested from Title 12, Maui County Code: Street, Sidewalks, and Public Places. Please identify the specific section in this title that the applicant is requesting an exemption from.

2. Page 78, Summary of Exemptions, No. 3 - Provide a breakdown of the estimated $1,075,010 value on offsite bike and pedestrian connectivity.

3. Page 78, Summary of Exemptions, No. 3 - The rationale for Exemption B.3 also notes a ". . . bike lane for pedestrians . . .", this needs to be revised for clarity.

4. Page 78, Summary of Exemptions, No. 3 - The project entry is located directly across the Kehalani Village Center which creates an opportunity for connectivity between the two areas. Limiting pedestrian crossings to the signalized intersections at Kuikahi Drive and Honoapiilani Highway and Kuikahi Drive and Waiale Road is unrealistic and potentially creates an unsafe situation for pedestrians wanting to cross the road at the project's entry location. The Department requests that the applicant consider solutions for a pedestrian crossing with appropriate safety improvements and that this crossing be installed to the satisfaction of the Department of Public Works.

5. Page 81, Summary of Exemptions, No. 9 – The applicant requests an exemption to Title 16, Maui County Code, Buildings and Construction, Section 16.26B.3600-Chapter 36: Improvements to Public Streets and states the following as rationale:

> "Exempt the development from having to construct pavements, curbs, and sidewalks along Kuikahi Drive, Waiale Road, and Honoapiilani Highway when doing so will offer little or no benefit to project residents but whose cost will add significantly to their rents."

Consider the transportation needs of residents who do not have access to a car. Is it implied that ***all*** of your residents will have a car? For families without a car, walking, biking, or public transportation may be their only options for mobility.

Children living in the area may attend Pu'u Kukui Elementary School, Iao Intermediate School or St. Anthony School. Bus service may not be an option for these children, so walking to school may be the only transportation option made available to them.

Sidewalks and bike lanes are Complete Street elements that improve mobility, provide additional safety, and promote geographic equity for residents. These elements are important community assets in this urbanized location, especially for children, seniors, and individuals with disabilities. As such, the Department strongly objects to the requested exemption.

6. The Traffic Impact Analysis report (TIAR) states that no bike improvement is identified along Waiale Road in the Hawaii Department of Transportation (HDOT) Bike Plan Hawaii. This should not be taken to mean that bicycle-related improvements do not need to be included with the project. Due to the affordable component of this project, improvements for non-motorized means of transportation such as bicycles should be provided.

7. Exemptions to pedestrian- and bicycle-related improvements are contrary to the County of Maui's efforts toward Smart Growth and the use of Complete Streets design methods.

8. Cost for exemption B.9. is included in cost presented for B.3. Provide a breakdown as curbs, gutters, and some pavement widening may need to be treated separate from B.3. (Offsite Pedestrian and Bike Connectivity) to present a better cost of the improvements.

9. TIAR provides a brief discussion on Transportation Demand Management (TDM) programs, however, project does not identify improvements for safely getting future residents to those services.

10. TIAR lists with project recommendations. The project narrative should clearly state which entity is responsible for the improvements.

11. Provide recommendations to improve traffic circulation within the TIAR study area. Report identifies existing concerns within the TIAR study area and the proposed project adds to the existing concerns. Provide an overview of recommendations that may improve traffic circulation within the TIAR study area.

12. TIAR recommends optimizing the Waiale Road/Kuikahi Drive intersection signal. Optimization should be done over a period of time. TIAR should propose a schedule to provide the optimized phasing and timing.

13. TIAR recommends providing a left turn with a minimum storage length of "at least 50 feet or as long as feasibly possible . . . ." What is actually required to serve the development, and what are the effects if the project does not provide the required length? Discussion on alternative project access points and configuration should be provided.

14. TIAR recommends providing a new northbound left turn lane with a minimum of at least 50 feet. Please confirm that 50 feet is the length required.

15. TIAR recommends restriping the southbound leg of the Kuikahi Drive Project Access. How does this impact overall intersection operations and who will implement this?

16. TIAR Figure 1.1 - Include study of Waiale Road/Kaupo Street, Waiale Road/Olomea Street, and Waiale Road/Kaohu Street intersections, or provide justification for not including them.

17. TIAR pg. 18, 25, 32-34 - Provide justification and calculations showing Level of Service (LOS) E/F during the AM and PM Peak Hours for the roundabout at Maui Lani Parkway/Kamehameha Avenue. The Department's most recent analysis of this intersection shows a single-lane roundabout operating at a LOS C (worst approach) in 2036 with similar volumes.

18. The Engineering Division recommends that the applicant schedule a meeting with the Department to discuss the Division's concerns with the proposed exemptions and proposed traffic mitigation.

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:da
xc: Highways Division
Engineering Division
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MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

David Goode, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK(2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Goode:

Thank you for your letter, dated February 22, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing project. On behalf of Legacy Wailuku, LLC, we acknowledge you have no additional comments and note your referral to your previous comment letter dated November 9, 2017.

In response to your previous comments regarding the proposed exemptions requested, the applicant is currently re-evaluating the list of proposed exemptions. Where possible the project will comply with the County's requirements. Your comments relating to the Traffic Impact Analysis Report (TIAR) has been forwarded to the traffic consultant. An updated TIAR is being prepared and will be included in the Draft EA. The engineering and traffic consultants will be contacting your Engineering Division.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:tn
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
Tyler Fujiwara, Austin Tsutsumi & Associates, Inc.
Darren Unemori, Warren S. Unemori Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

FEB 08 2018
DON MEDEIROS
Director

MARC I. TAKAMORI
Deputy Director

(808) 270-7511

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
2145 Kaohu Street, Suite 102
Wailuku, Hawaii, USA 96793

February 5, 2018

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Subject: Early Consultation Request for Wailuku Affordable Housing Project by Legacy Wailuku, LLC

Dear Ms. Suyama,

We are in receipt of your letter dated January 26, 2018. We have no additional comments at this time, but look forward to reviewing future documents as they are made available.

Please feel free to contact me if you have any questions.

Sincerely,

Don Medeiros
Director

ALAN M. ARAKAWA
Mayor

DON MEDEIROS
Director

MARC I. TAKAMORI
Deputy Director

(808) 270-7511

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
2145 Kaohu Street, Suite 102
Wailuku, Hawaii, USA 96793

October 18, 2017

Mr. Vince Bagoyo
1500 Kilinoe Place
Wailuku, HI 96793

Subject: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements

Dear Mr. Bagoyo,

We appreciate the opportunity to provide comments on your Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project and Related Improvements.

Three bus routes operate within the vicinity of the proposed project on Waiale Rd in Wailuku, HI. The first two routes are the Wailuku Loop Route #1 and the Wailuku Loop Reverse Route #2. Both of these routes start and end at Queen Ka'ahumanu Center and circulate within Wailuku. The two stops nearest to this project are at Ka Hale A Ke Ola on Waiale Road and the other is on Kamole Street in the Kehalani Subdivision. The third route is the Lahaina Islander Route #20, which travels between Central Maui and Lahaina Town hourly. It does not stop near the development, but does pass the area as it travels along Honoapi'ilani Highway. Transit was referenced within the application, but we wanted to share a little more detailed description of transit options near the proposed project.

While a bus stop isn't currently provided right next to the proposed project, providing interconnecting sidewalk and ample lighting in the evening is necessary for walkable communities and for the safety of potential public transit riders.

Please feel free to contact me if you have any questions.

Sincerely,

Don Medeiros
Director

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Don Medeiros, Director
Department of Transportation
County of Maui
2145 Kaohu Street, Suite 102
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Medeiros:

Thank you for your letter dated February 5, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. We understand that your Department has no additional comments.

With respect to your comment letter dated October 18, 2017, the applicant will be providing walkways and ample lighting to facilitate walkable communities and for the safety of potential public transit riders.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. Copies of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
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FEB 06 2018

From: Audrey Dack [mailto:Audrey.Dack@co.maui.hi.us]
Sent: Tuesday, February 06, 2018 1:52 PM
To: Colleen Suyama <Colleen@munekiyohiraga.com>
Cc: Marti Buckner <Marti.Buckner@co.maui.hi.us>
Subject: Early Consultation Request for Wailuku Affordable Housing

Aloha Colleen,
Thank you for the opportunity for an early consultation on this project. Since the Department of Water Supply's October 23, 2017 letter was attached to the documents we received from your office, we will make no comment at this time. Contact me should you have questions.
Mahalo,
Audrey

Audrey Dack, Planner
Department of Water Supply
Water Resources and Planning
2200 Main Street, Ste. 102
Wailuku, Hi 96793
Ph. (808) 463-3109

1

ALAN M. ARAKAWA
Mayor

DAVID TAYLOR, P.E.
Director

GLADYS C.BAISA
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

October 23, 2017

Mr. Vince Bagoyo, Project Consultant
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Re: Draft Environmental Assessment (DEA) for the Proposed Wailuku Apartment Rental Housing Project, Waiale Road, Wailuku
TMK: (2) 3-5-001:064

Dear Mr. Bagoyo,

Thank you for the opportunity to comment on the DEA for the proposed Wailuku Apartment Rental Housing Project.

Source Availability, System Infrastructure and Consumption
The project area is served by the Central system and overlies the Iao aquifer, with a sustainable yield of 20 million gallons per day (gpd) according to the Commission on Water Resource Management.
The Department of Water Supply (DWS) maintains an 8-inch water line that runs parallel to Kuikahi Drive as well as an 18-inch water transmission line adjacent to the east property line. The nearest fire hydrant is within 150' of the site, at the corner of Waiale Road and Kuikahi Drive. There is no DWS meter on the parcel, which is subject to the County's Availability Policy, as codified in Title 14 of the Maui County Code. System requirements will be determined in the subdivision process. Please consult with DWS Engineer Tammy Yeh at 808-270-7835 for further information.
The document states that the projected water demand is 188,940 gpd, which is consistent with the guidelines set in Hawaii Water System Standards, 2002.

Aquifer Protection and Best Management Practices (BMPs)
We are pleased to note that the landscape plan includes installing native plant species, which help to conserve water and protect the Iao aquifer from further degradation. We recommend that the plants be watered using a dripline (in lieu of spray) irrigation system with rain sensors, and that all irrigation be scheduled between 7 PM and 7 AM, no more than twice weekly once plants are established.
The density of the project includes a large percentage of lot coverage with impermeable surfaces, which, with the exception of the drainage basin, limits the aquifer recharge. The entirety of the proposed project lies within the DWS two year time of travel wellhead protection (WHP) area. The WHP areas are delineated into two zones, the ten and two (closer to the well) year time of travel zones. Because the project lies within the two year time of travel zone, in an area that is more sensitive to pollutants that could enter the Iao aquifer and migrate to the well intake location, BMPs should be thoroughly implemented.

We recommend including parking with permeable surfaces, reducing runoff and improving aquifer recharge. The attached as well as the following BMPs designed to prevent contamination and protect groundwater should be noted in the EA and implemented:

1. Sweep parking lots and other paved areas periodically to remove debris. Dispose of debris in the garbage.
2. Post signs to control litter and prevent auto maintenance activities such as changing fluids or washing cars, which should not be allowed on the property.
3. Wash water from all cleaning operations must be discharged to the sanitary sewer.
4. Keep dumpster areas free of litter and lids closed.
5. Avoid mixing or using pesticides, fertilizers, herbicides, degreasers, fuels, or other pollutants onsite.

Should you have any questions, please call Staff Planner Audrey Dack at (808) 463-3109 or email audrey.dack@co.maui.hi.us.

Sincerely,

David Taylor, P.E. Director

mlb
cc: DWS Engineering Division

Best Management Practices (BMPs)

Construction BMPs

- Prevent cement products, oil, fuel and other toxic substances from falling onto the ground as they can leach into the water table. Remove all construction debris and toxic substances daily.
- Maintain vehicles and equipment to prevent oil or other fluids from leaking. Concrete trucks and tools used for construction should be rinsed off-site.
- Properly install and maintain erosion control barriers such as silt fencing or straw bales.
- Disturb the smallest area possible.
- Keep runoff on site.
- Use reclaimed water as an alternative source of non-potable water for dust control during construction. Kahului Wastewater Treatment Plant provides reclaimed water at a reasonable cost.
- Properly and promptly dispose of all loosened and excavated soil and debris material.

Conservation BMPs – Indoor

- Use EPA WaterSense labeled plumbing fixtures.
- Install flow reducers and faucet aerators in all plumbing fixtures wherever possible.
- Install dual flush toilets with high efficiency models that use 1.28 gallons per flush or less.
- Install showerheads with a flow rate of 1.5 gallons per minute (gpm) at 60 pounds per square inch (psi).
- Install bathroom sink fixtures that do not exceed 1 gpm at 60 psi.
- Laundry facilities should use Energy Star labeled washers.

Conservation BMPs – Outdoor

- Retain groundcover until the last possible date. Stabilize denuded areas by sodding or planting as soon as possible. Use high seeding rates to ensure rapid stand establishment.
- Limit turf to as small an area as possible.
- After plants are established, avoid fertilizing to stimulate growth.
- Use Smart Approved WaterMark irrigation products. Examples include evapotranspiration irrigation controllers and drip irrigation.

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 22, 2018

Ms. Gladys Baisa, Deputy Director
Department of Water Supply
County of Maui
200 S. High Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Baisa:

Thank you for your department's e-mail correspondence of February 6, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. We understand that your Department has no additional comments. On behalf of Legacy Wailuku, LLC, we offer the following information addressing your previous comment letter dated October 18, 2017, which will be included in the Draft EA.

Source Availability, System Infrastructure and Consumption

We acknowledge information provided by the Department of Water Supply (DWS) has been included in the Draft EA. However, in addition to the 8-inch waterline in Kuiʻkahi Drive and 18-inch waterline adjacent to the east property line in Waiʻale Road we understand that there is also a 12-inch waterline within Waiʻale Road that the project proposes to connect to.

Also, we acknowledge the project is subject to the County's Availability Policy, as codified in Title 14, Maui County Code.

Aquifer Protection and Best Management Practices

The DWS's recommendation to utilize dripline has been forwarded to the design consultant for consideration.

We acknowledge the project is located within the two-year time of travel zone wellhead protection area and is more sensitive to pollutants that could enter the ʻĪao aquifer and migrate to the well intake location. As such, the DWS's recommended Best Management Practices (BMPs) have been included in the Draft EA.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. Copies of your letters and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:yp
cc: Linda Schatz, Schatz Collaborative LLC
Vince Bagoyo, Bagoyo Development Consulting Group
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From: Reid <reidmaui@hawaii.rr.com>
Sent: Thursday, February 15, 2018 6:02 PM
To: Colleen Suyama
Subject: Comments on Legacy Partners Project
Attachments: Report Affordable House Legacy Development 021218.pdf; ATT00001.txt

Legacy Partners
Feb.15, 2018

Good Afternoon Colleen and thank you for hearing my comments on this issue and hopefully we will not be seeing such an outrageous amount of exemptions for a project that does not address truly affordable rentals (80% & lower) in which a lot of our younger local families fall into this category. I will be honest with you, that last Environmental Assessment was horrible. Three story buildings along Honoapiilani Hwy. blocking our ocean and Mauka views does not go very well with a lot of the old timers and that is why protecting our view corridors is placed within our Waikapu Statement of Values.
Parking stalls is limited to 1.5 cars per unit. Where do the other cars park? On the highway or in Longs @ Foodlands parking lot. And what's worse is when we were talking about the high pricing on units it was suggested that people rent rooms to other people to offset the cost, but what does that do? ADD MORE CARS. Sorry! But more parking is needed.
Legacy needs to input sidewalks around the perimeter of the property for kids and elderly people walking to and from school or to the shopping areas. I really couldn't believe they felt that it was ok to leave it. Safety is and should be priority for our young and elderly.
With this population increase forecast it was stated that traffic,schools,parks,emergency would not be impacted. I'm sorry but whoever wrote this must have been living on the moon for the last century.
Traffic! With adding 500 more vehicles in this area I feel that it would be time to widen Waiale Rd.
In conclusion I really want and support affordable homes and rentals but I also strongly believe that you don't destroy the existing areas to do so just for profits. Smart planning and working with communities and groups equals a win win situation.
Thank you for your time.

Reid Kawabata

schatz collaborative
Mobile: 808 428 8717
Email: lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

March 20, 2018

Reid Kawabata
Via e-mail: reidmaui@hawaii.rr.com

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Kawabata:

Thank you for your e-mail correspondence of February 15, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information addressing your comments.

Since the withdrawal of the previous Draft Environmental Assessment, we have re-evaluated the project, as follows:

1. We are in the process of reconsidering the amount of exemptions to be sought and finding ways to meet the regulatory requirements.

2. An architectural view analysis will be prepared and included in the new EA.

3. Our design consultant has redesigned the site plan in order to provide the required two (2) stalls per unit. For this reason, we will no longer seek an exemption from the parking code.

4. The project will provide walkways along Kui'kahi Drive and Wai'ale Road for pedestrians.

5. Our traffic consultant is reviewing the project and comments received during the comment period of the previous Draft EA. An updated traffic impact analysis report will be included in the Draft EA.

6. Impacts on other infrastructure components and public services will be addressed in the new EA.

schatz collaborative

Mobile: 808 428.8717
Email: lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

We will make every effort to continue to meet with the various communities that may be affected by the Wailuku Apartment Rental Housing project to keep you informed, maintain dialogue with you regarding your concerns and hopefully being able to propose solutions that address your concerns.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. We appreciate your input and a copy of your e-mail correspondence and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808)428-8717 or Colleen Suyama of Munekiyo Hiraga at 244-2015.

Sincerely,

Linda Schatz
Schatz Collaborative LLC

cc: Vince Bagoyo, Bagoyo Development Consulting Group
Michael T. Munekiyo, Munekiyo Hiraga
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February 22, 2018

Colleen Suyama
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

RE: Wailuku Affordable Housing Project- Request for Comment

Dear Ms. Suyama:

The Waikapu Gardens Homeowners Association appreciates this opportunity to give feedback on the proposed Wailuku Affordable Housing Project by Legacy Wailuku, LLC.

After review of the Draft Environmental Assessment (DEA) prepared for this project, we would like to share the following comments regarding this projects location, and the impacts it will have on our residents of Waikapu Gardens and the surrounding communities.

1. **Location:**
   The proposed site for this project is located at the corner of a very busy intersection. It will include nine three story buildings on 14.416 acres of land with 1 to 3 bedroom units for a total of 324 rental units. This will be adding a dense population of residents to an already congested intersection which is very concerning.

2. **Traffic:**
   The project will be built at the intersection of Kuikahi Drive, Maui Lani Parkway and Waiale Road. During peak traffic hours (7:40 am & 4:30 pm), there already exits a gridlock of traffic from the surrounding communities of Wailuku, Kahului and Waikapu who all use this intersection as a major commute route to schools and work. Adding another 324 units at this intersection will have devastating effects to the already congested traffic on Waiale Road.

   One of the two entrance/exits for this project is on Waiale Road. This will add to the exiting gridlock at this busy intersection. There are other partially approved and approved developments in the area such as: A&B's Waiale Project (2,550 units) the Waikapu Country Towne (1,400) along with the Waiale Elua Project (70 units) that will add to the increase of traffic on Waiale Road. This will further impact residents who live on and use Waiale Road.

3. **Sidewalks and pedestrian crossing:**
   There should be complete sidewalks and pedestrian crossing on Kuikahi Drive and Waiale Road. This will provide pedestrians with safe access to the nearby Foodland, Longs Drugs and McDonald's restaurant in that area.

4. **Parking:**
   According to the DEA, the proposed project will include nine three story buildings with 1 to 3 bedrooms units for a total of 324 units with only 485 parking stalls. This averages to about 1.5 parking stalls per unit. This appears to be inadequate for a family living in a 2 to 3 bedroom unit with more than one vehicle

5. **Exemptions of fees:**
   The proposed project is requesting numerous exemptions from a number of fees including school and road fees. The residents and families who will be living at this project will add to school enrollments and use the roads located in the nearby district. As such, the project should be required to pay its fair share of fees. If not, it may become a burden for the county and taxpayers to bear.

6. **Number of affordable units offered:**
   Of the 324 units being proposed in this project, it appears that only a small percentage (17%) will actually be offered to families under the 100% median income. If this is an affordable rental project, it should offer more affordable rental units in its inventory. Especially when taking into consideration the numerous exemptions being requested by the developer.

7. **Community concerns:**
   During community meetings held with the developer's representatives and the Waikapu Community Association on June 6, 2017 and December 5, 2017, there were a number of concerns and suggestions from the community regarding this project. The developer and its representatives should work together with the community in assuring these concerns are properly addressed.

The Waikapu Gardens Homeowners Association appreciates the opportunity to submit comments on this proposed project. We would like to state for the record that we support affordable housing, being one of the true affordable housing projects built on Maui. More importantly, we feel careful and smart planning are key components to ensuring future developments will not only meet the needs of our county, but also be in balance with the communities in which they will become a part of.

We are concerned about the location of the Wailuku Rental Apartment project, the traffic it will add to an already congested area, and the number of exemptions the developer is requesting. Perhaps the developer could consider downsizing the project to add less congestion and traffic to this busy location and adding more parking stalls to ensure the project has adequate accommodations for the residents who will be living in these apartments.

Mahalo for allowing us to provide feedback on the Wailuku Rental Apartment project. We look forward to working with you and the development of your proposed project.

Respectfully Submitted,

Waikapu Gardens Homeowners Association
P.O. Box 2390
Wailuku, HI 96793

schatz collaborative

Mobile: 808 428 6717
Email lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

March 20, 2018

Glenn Adolpho
Waikapu Gardens Homeowners Association
P.O. Box 2390
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Adolpho:

Thank you for your letter of February 22, 2018, responding to our request for early consultation for the preparation of a new Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing project. It is our understanding that your Association's comments are based on the previous Draft EA that was published on September 23, 2017, which was withdrawn on February 8, 2018. However, previous comments received will be included in the new Draft EA. These previous comments are being reviewed and updated technical reports prepared.

On behalf of Legacy Wailuku, LLC, we offer the following information addressing your comments on the Draft EA.

1. **Location:** We acknowledge your comments regarding the location of the project at the corner of a busy intersection.

2. **Traffic:** An updated traffic impact analysis report is being prepared by the traffic consultant, which will be included in the Draft EA. The traffic consultant is coordinating their traffic study with the County Department of Public Works (DPW) since these are county roadways. Also, the traffic consultant is aware of A&B's Wai'ale Project, Waikapū Country Town and the Wai'ale Elua projects and is following up on these projects as to the anticipated phasing of these projects and its potential cumulative impacts on the existing roadways, as well as proposed mitigation measures to minimize impacts associated with these projects and the proposed project.

schatz collaborative
Mobile 808.428.8717
Email lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

3. **Sidewalks and pedestrian crossing:** The project's engineering consultant is coordinating improvements on Kui'kahi Drive and Wai'ale Road with the DPW, such as pedestrian walkways, pavement widening for a bike lane and drainage. Also, the consultant is in discussion with the DPW regarding a crossing beacon on Kui'kahi Drive to provide safe crossing to the Kehalani Village Center from the project site.

4. **Parking:** Since publication of the previous Draft EA the design consultant has reviewed the project's site plan. The conceptual site plan will include parking at a rate of two (2) stalls per unit in accordance with the County's parking ordinance.

5. **Exemption fees:** Comments from the Department of Education (DOE) noted that the project will be required to pay the school impact fees. Legacy Wailuku, LLC will not be requesting a waiver from the impact fee and will enter into a School Contribution Agreement with the DOE.

6. **Number of affordable units offered:** Approximately 110 of the units will be affordable to families with incomes below 100 percent of the area median income (AMI) for Maui. This represents approximately 34 percent of the total housing units within the project. Also, another 71 units will be affordable to families with incomes between 100 percent and 120 percent of the AMI.

7. **Community concerns:** Legacy Wailuku, LLC will continue to dialogue with the Waikapū community, including the Waikapu Gardens Homeowners Association. Through a collaborative approach with the communities, concerns raised can be addressed and mitigation measures proposed that minimizes impacts on the environment in order to bring affordable rental housing to the residents of Maui.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your letter and this response will be included in the Draft EA. A copy of the new Draft EA will be forwarded to your Association for review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808)428-8717 or Colleen Suyama of Munekiyo Hiraga at 244-2015.

Sincerely,

Linda Schatz
Schatz Collaborative LLC

cc: Vince Bagoyo, Bagoyo Development Consulting Group
Michael T. Munekiyo, Munekiyo Hiraga
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Agency Response\Adolpho.G.doc

From: Jayne Kinoshita <jskinos@gmail.com>
Sent: Saturday, February 17, 2018 10:04 AM
To: Colleen Suyama
Subject: Comments re: Wailuku Apartment Rental Housing Project

To Whom it May Concern

I am writing to ask that you consider a few critical impacts in your assessment for the Wailuku Apartment Rental Housing Project. First of all, I am in favor of the concept of providing a centralized, well managed/maintained rental housing community. My daughter lives in one in San Diego and it looks great within the community,across a high school and runs very well due to its design and a great onsite property manager.

For the project in Wailuku, my main concern is the additional impact to the morning traffic that is currently significantly backed up coming down Kuikahi Drive or turning down Kuikahi Drive from Honoapiilani Hwy. Once on Kuikahi, vehicles needing to turn left on Waiale by Longs have a difficult time getting to that left lane. Cars are forced to go straight or turn right on Waiale if they couldn't get into the left lane which increases the probability of accidents which have occurred. It's dangerous especially since a lot of them are kids driving to Baldwin High School.

My other concern is the parking situation. In my daughter's apartment complex, there is ample street parking which is not in a high traffic area. They restrict any parking during work hours which prevents any impact to traffic there. There is not a good stretch for street parking in the location of this project so ample stalls per unit (and extra to purchase) should be included in the plan. I'm not sure if anything less than 2 parking stalls per unit will be sufficient for the complex. On Maui, a couple will have 2 cars and a family would have at least 2. If they had 2 cars or more, where will they park.

I would love your project to become a success so please consider the impacts above and also provide guidelines to make it an aesthetically addition to the neighborhood. We really need well planned housing.

Thank you for your consideration,

Jayne Kinoshita
Resident of Waiolani, Waikapu
(808) 385-1545

schatz collaborative
Mobile: 808 428 8717
Email: lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

March 20, 2018

Jayne Kinoshita
Via e-mail: jkskinos@gmail.com

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Kinoshita:

Thank you for your e-mail correspondence of February 17, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information addressing your comments.

Since the withdrawal of the previous Draft Environmental Assessment, we have re-evaluated the project, as follows:

1. Our traffic consultant is reviewing the project and comments received during the comment period of the previous Draft EA. An updated traffic impact analysis report will be included in the Draft EA.

2. Our design consultant has redesigned the site plan in order to provide the two (2) stalls per unit required by the County of Maui parking ordinance.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your e-mail correspondence and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808)428-8717 or Colleen Suyama of Munekiyo Hiraga at 244-2015.

Sincerely,

Linda Schatz
Schatz Collaborative LLC

cc: Vince Bagoyo, Bagoyo Development Consulting Group
Michael T. Munekiyo, Munekiyo Hiraga
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Agency Response\Kinoshita.J.doc

From: Ernest Grace <brahda808@msn.com>
Sent: Sunday, February 18, 2018 9:56 PM
To: Colleen Suyama
Subject: Questions

Hi Colleen,

My name is Ernest Grace and I'm from the Waikapu Community Association and Waikapu Gardens Homeowners Association. I sit on both boards. Thank you for your time and the opportunity to review your plans and ask for clarifications.

I have some questions regarding your new project in Waikapu.

1. What roadway improvements will they do on Kuikahi and Waiale entrances to this project?

2. Will they be erecting street lights and sidewalks? That area really dark for pedestrian traffic.

Sent from my iPhone 8 Plus.

schatz collaborative

Mobile 808 428 8717
Email lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

March 20, 2018

Ernest Grace
Via e-mail: brahda808@msn.com

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. Grace:

Thank you for your e-mail correspondence of February 18, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information addressing your comments.

Since the withdrawal of the previous Draft EA, we have re-evaluated the project, as follows:

1. Our engineering consultant reviewed the comments received during the comment period of the previous Draft EA and in coordination with the County Department of Public Works proposes improvements consisting of left-turning storage lanes into the project's driveways on Wai'ale Road and Kui'kahi Drive, extending the roadway pavement to accommodate bike lanes, and creating grassed swales along the roadway pavement for drainage.

2. The project will provide walkways along Kui'kahi Drive and Wai'ale Road for pedestrians with lighting on the property near the driveway entrances.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your e-mail correspondence and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808)428-8717 or Colleen Suyama of Munekiyo Hiraga at 244-2015.

Sincerely,

Linda Schatz
Schatz Collaborative LLC

cc: Vince Bagoyo, Bagoyo Development Consulting Group
Michael T. Munekiyo, Munekiyo Hiraga
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FEB 20 2018

On behalf of Legacy Wailuku, LLC, we would appreciate receiving any comments you may have by February 16, 2018. Please address written comments to the following:
23,

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Thank you for your assistance with this request. Should you have any questions or require additional clarification, please contact me at (808) 244-2015 or via email at colleen@munekiyohiraga.com.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh
Enclosures
Copy to: Linda Schatz, Schatz Collaborative LLC (w/enclosures)
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Early Consultation Letter (NEW).doc

*Deadline for comments has been extended to February 23, 2018.

JUST ANOTHER GREEDY GROUP of DEVELOPERS WHO CONTINUE TO TURN OUR ISLAND INTO A LOS ANGELES WITHOUT SMOG!

IS THERE NO END TO THE GREED?
ONE of THE MOST BEAUTIFUL VIEWS ON THE ISLAND TURNED INTO A GROUP of TENEMENT BOXS (OVERPRICED I'M SURE!)
OH! THROW SOME BONES TO THE POOR TO MAKE CODE
SHAME ON YOU AND YOURS

BAD — PONO!!

JOHN & JANICE FRANCIS
OWNERS 531 POLIANI DR
WAILUKU HEIGHTS

schatz collaborative

Mobile: 808 428 8717
Email: lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

March 20, 2018

John and Janice Francis
531 Polulani Drive
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. and Mrs. Francis:

Thank you for your comment of February 20, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project.

Legacy Wailuku, LLC seeks to develop needed rental housing for Maui's residents, especially those who are within 80 percent to 120 percent of the area median income (AMI) for Maui. The Draft EA will provide more detailed information regarding the project and its impacts. A copy of the Draft EA will be provided to you for review and comment. Your comments and this response letter will be included in the Draft EA.

In the meantime, if there are any questions or if additional information is needed, please feel free to contact me (808)428-8717 or Colleen Suyama of Munekiyo Hiraga at 244-2015.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes review process.

Sincerely,

Linda Schatz
Schatz Collaborative LLC

cc: Vince Bagoyo, Bagoyo Development Consulting Group
Michael T. Munekiyo, Munekiyo Hiraga
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Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Colleen,

Thank you for sending the information regarding the proposed Wailuku Apartment Rental Housing Project and Related Improvements by Legacy Wailuku. I am definitely in favor of affordable housing. However before these apartments and or homes are built careful study of infrastructures must be done to avoid crowding of overnight parking, traffic flow and especially keeping pedestrians safe.
The traffic on Kuikahi and Waiale is very bad especially the school and "work" traffic in the mornings and afternoons. This intersection serves both Iao Intermediate School and Pomaikai Elementary School. Traffic going to Maui Lani Parkway is backed up to the Mormon Church and traffic on Waiale Road is backed up until Kuikahi. Your proposal of an entry into this project on Kuikahi, I think needs to be reconsidered. Also the entry will be directly across the entrance to Longs and Foodland. Right now it is already difficult to turn left as one enters or exits after shopping there.

Please consider the traffic flow and keep the pedestrians safe.

Thank you for your time

Elaine Fujita. (gfmaui50@hotmail.com)
808 281-0581 cell

schatz collaborative

Mobile. 808 428 8717
Email: lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

March 20, 2018

Elaine Fujita
Via e-mail: gfmaui50@hotmail.com

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Ms. Fujita:

Thank you for your e-mail correspondence of February 23, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information addressing your comments.

1. The Draft EA will analyze the infrastructure and public facilities needs of the proposed project such as, water, sewers, drainage, traffic, utilities, schools and parks to determine the project's impacts and, as appropriate, propose mitigation measures to minimize impacts associated with the project.

2. We are aware that there is an existing traffic problem on Kui'kahi Drive and Wai'ale Road during the morning and afternoon peak hours of traffic. A traffic impact analysis report is being prepared by the traffic consultant, which will be included in the Draft EA. Also, separate left-turning lanes into the project driveways on Kui'kahi Drive and Wai'ale Road are proposed.

3. A copy of your email correspondence has been forwarded to the traffic consultant for review and consideration.

4. Improvements on Kui'kahi Drive and Wai'ale Road are being coordinated with the County Department of Public Works and proposes to include roadway pavement widening in order to accommodate a bike lane, drainage and ongrade sidewalks for pedestrians.

schatz collaborative

Mobile: 808 428 8717
Email: lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes, review process. A copy of your e-mail correspondence and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808)428-8717 or Colleen Suyama of Munekiyo Hiraga at 244-2015.

Sincerely,

Linda Schatz
Schatz Collaborative LLC

cc: Vince Bagoyo, Bagoyo Development Consulting Group
Michael T. Munekiyo, Munekiyo Hiraga
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Agency Response\Fujita,E.doc

From: Debby Takahashi <melemeletakahashi@gmail.com>
Sent: Thursday, February 22, 2018 1:49 PM
To: Colleen Suyama
Subject: Affordable Housing Units

We are Wailuku Heights Extension residents. Our concerns:
1. Have you seen the morning traffic backup from Waiale Rd. and Honoapi'ilani Hwy? It is bad. We are afraid the egress facing Longs and the gas station will be unworkable. Could a sign allowing only right hand turns toward Waiale from 6:30AM to 8:30AM help?
Those wanting to get onto Honoapi'ilani Hwy/High St would then use the Waiale Rd egress.

2. Where would the children go to elementary school? Pu'u Kukui and Pomakai are both overcrowded already!

Iao and Maui Waena Intermediate Schools are both refusing Geographic Exceptions as they are both overcrowded. Do you have any influence in getting the DOE to build new schools????? (Turn key ready!)

Mahalo,
Bob & Debby Takahashi

schatz collaborative

Mobile. 808 428 8717
Email lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

March 20, 2018

Bob and Debby Takahashi
Via e-mail: melemeletakahashi@gmail.com

SUBJECT: Early Consultation Request for the Proposed Section 201H-38, Hawai'i Revised Statutes, Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawai'i

Dear Mr. and Ms. Takahashi:

Thank you for your e-mail correspondence of February 22, 2018, responding to our request for early consultation for the preparation of a Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing Project. On behalf of Legacy Wailuku, LLC, we offer the following information addressing your comments.

1. An updated traffic impact analysis report will be included in the Draft EA and will address the existing traffic congestion during morning peak hour traffic. Also, your suggestion to limit access from the Kui'kahi Driveway from 6:30 a.m. to 8:30 a.m. has been forwarded to the traffic consultant for consideration.

2. According to comments received from the Department of Education (DOE), students from the proposed project will be going to Pu'u Kukui Elementary, Maui Waena Intermediate and Maui High. The applicant will comply with the Central Maui District Impact fee requirements of the DOE, which are intended to help mitigate development-related school facility impacts.

Again, thank you for your participation in the Chapter 343, Hawai'i Revised Statutes review process. A copy of your e-mail correspondence and this response will be included in the Draft EA. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808)428-8717 or Colleen Suyama of Munekiyo Hiraga at 244-2015.

Sincerely,

Linda Schatz
Schatz Collaborative LLC

cc: Vince Bagoyo, Bagoyo Development Consulting Group
Michael T. Munekiyo, Munekiyo Hiraga
K:\DATA\Legacy\Wailuku Afford Rental\Applications\ECL\Agency Response\Takahashi.B.D..doc

WAILUKU HEIGHTS EXTENSION COMMUNITY ASSOCIATION
Post Office Box 968
Wailuku, Maui, Hawaii 96793

January 31, 2018

VIA EMAIL--COLLEEN@MUNEKIYOHIRAGA.COM

Ms. Colleen Suyama
Project Manager
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

RE: Early Consultation Request for Proposed Section 201-H, Hawai'i Revised Statutes (HRS), Wailuku Affordable Housing Project by Legacy Wailuku, LLC at TMK (2)3-5-001:064, Wailuku, Maui, Hawaii

Dear Colleen:

Thank you for your letter dated January 26, 2018, regarding the above-referenced matter. I have met with project consultant Vincent Bagoyo who reviewed the plan with me. I have discussed the project with our Board of Directors. We are supportive of efforts to expand affordable housing for our residents.

Mahalo for your continued engagement with Wailuku Heights Extension Community Association (Phase 1).

Sincerely,

/s/ *Wayne N. Hedani*

Wayne N. Hedani
President

WNH/cfn

cc: Mr. Jack Breen (via email)
Mr. Greg Heyd (via email)
Ms. Cathy Kalehuawehe (via email)
Mr. Joseph Balangitao (via email)
Mr. Colin Yamamoto (via email)
Mr. Charles Hall (via email)

LETTERS RECEIVED DURING THE DRAFT ENVIRONMENTAL ASSESSMENT REVIEW PERIOD AND RESPONSES TO SUBSTANTIVE COMMENTS

XIII

XIII. LETTERS RECEIVED DURING THE DRAFT ENVIRONMENTAL ASSESSMENT REVIEW PERIOD AND RESPONSES TO SUBSTANTIVE COMMENTS

The Draft Environmental Assessment (EA) for the subject project was filed and published in the Office of Environmental Quality Control's Environmental Notice on April 8, 2018. The following agencies, organizations, and individuals were sent a copy of the Draft EA. Comments on the Draft EA were received during the 30-day public comment period. Letters received, as well as responses to substantive comments, are included in this chapter.

FEDERAL AGENCIES

1. **Natural Resources Conservation Service**
   U.S. Department of Agriculture
   210 Imi Kala Street, Suite 209 Wailuku, Hawai'i 96793-2100

2. Tunis W. McElwain
   Chief, Regulatory Branch
   U.S. Department of the Army
   U.S. Army Engineer District, Honolulu
   Regulatory Branch
   Building 230
   Fort Shafter, Hawai'i 96858-5440

3. Michelle Bogardus
   Island Team Leader
   U. S. Fish and Wildlife Service
   300 Ala Moana Blvd., Rm. 3-122
   Honolulu, Hawai'i 96850

STATE AGENCIES

4. Christina Kishimoto, Superintendent
   State of Hawai'i
   Department of Education
   P.O. Box 2360
   Honolulu, Hawai'i 96804

5. Virginia "Ginny" Pressler, MD, MBA, FACS, Director
   State of Hawai'i
   Department of Health
   919 Ala Moana Blvd., Room 300
   Honolulu, Hawai'i 96814

6. Laura McIntyre, AICP
   State of Hawai'i
   Department of Health
   Environmental Planning Office
   919 Ala Moana Blvd., Suite 312
   Honolulu, Hawai'i 96814

7. Suzanne Case, Chairperson
   State of Hawai'i
   Department of Land and Natural Resources
   P. O. Box 621
   Honolulu, Hawai'i 96809

8. Alan Downer, Administrator
   State of Hawai'i
   Department of Land and Natural Resources
   State Historic Preservation Division
   601 Kamokila Blvd., Room 555
   Kapolei, Hawai'i 96707

9. Jade Butay, Interim Director
   State of Hawai'i
   Department of Transportation
   869 Punchbowl Street
   Honolulu, Hawai'i 96813

10. Thomas Travis, Administrator
    Hawai'i Emergency Management
    Office of Director of Emergency Management
    Civil Defense
    3949 Diamond Head Road
    Honolulu, Hawai'i 96816

11. Dr. Kamana'opono Crabbe, Chief Executive Officer
State of Hawai'i
Office of Hawaiian Affairs
560 N. Nimitz Highway, Suite 200
Honolulu, Hawai'i 96817

12. Leo R. Asuncion, Jr., AICP, Director
State of Hawai'i
Office of Planning
P. O. Box 2359
Honolulu, Hawai'i 96804

13. Dan Orodenker, Executive Officer
State of Hawai'i
State Land Use Commission
P.O. Box 2359
Honolulu, Hawai'i 96804

14. Roderick Becker, Comptroller
State of Hawai'i
Department of Accounting and General Services
1151 Punchbowl Street, #426
Honolulu, Hawai'i 96813

15. Luis P. Salaveria, Director
State of Hawai'i
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawai'i 96804

16. Scott Enright, Chair
State of Hawai'i
Department of Agriculture
1428 South King Street
Honolulu, Hawai'i 96814-2612

17. **State of Hawai'i**
Department of Business, Economic Development & Tourism
Research Division Library
No. 1 Capitol District Building
250 S. Hotel Street, Suite 435
Honolulu, Hawai'i 96813

18. Heidi Meeker
State of Hawai'i
Department of Education
Office of Business Services
c/o Kalani High School
4680 Kalaniana'ole Highway, #T-B1A
Honolulu, Hawai'i 96821

19. **State of Hawai'i**
Department of Education
Office of Planning
3633 Waialae Avenue, Room C-209
Honolulu, Hawai'i 96816

20. Lene Ichinotsubo
State of Hawai'i
Department of Health
919 Ala Moana Blvd., Room 212
Honolulu, Hawai'i 96814

21. Alec Wong, P.E., Chief
State of Hawai'i
Department of Health
Clean Water Branch
Hale Ola, Room 225
2827 Waimano Home Road
Pearl City, Hawai'i 96782

22. **State of Hawai'i**
Department of Health
Environmental Health Administration
P.O. Box 3378
Honolulu, Hawai'i 96801

23. Patti Kitkowski
State of Hawai'i
Department of Health
Maui Sanitation Branch
54 South High Street, Room 300
Wailuku, Hawai'i 96793

24. Linda Chu Takayama, Director
State of Hawai'i
Department of Labor and Industrial Relations
830 Punchbowl St #321
Honolulu, Hawai'i 96813

25. Barker Farris
State of Hawai'i
Department of Land and Natural Resources
State Historic Preservation Division
101 Maalaea Boat Harbor Road
Wailuku, Hawai'i 96793

26. Nolan Espinda, Director
State of Hawai'i
Department of Public Safety
919 Ala Moana Boulevard, 4th Floor
Honolulu, Hawai'i 96814

27. Marvin Moniz, District Manager Islands of Maui, Moloka'i, and Lāna'i
State of Hawai'i
Department of Transportation
Airports Division
1 Kahului Airport Road, Unit 5
Kahului, Hawai'i 96732

28. Jobie Masagatani, Chair
State of Hawai'i
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, Hawai'i 96805

29. Scott Glenn, Director
State of Hawai'i
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawai'i 96813

30. Senator Gil Keith-Agaran
Hawai'i State Senate
Hawai'i State Capitol, Room 221
415 S. Beretania Street
Honolulu, Hawai'i 96813

COUNTY AGENCIES

32. Stewart Stant, Director
County of Maui
Department of Environmental Management
2050 Main Street, Suite 2B
Wailuku, Hawai'i 96793

33. Jeffrey A. Murray, Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawai'i 96732

34. Carol Reimann, Director
County of Maui
Department of Housing and Human Concerns
One Main Plaza
2200 Main Street, Suite 546
Wailuku, Hawai'i 96793

35. Ka'ala Buenconsejo, Director
County of Maui
Department of Parks and Recreation
700 Hali'a Nakoa Street, Unit 2F
Wailuku, Hawai'i 96793

36. William Spence, Director
County of Maui
Department of Planning
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

37. Tivoli Faaumu, Chief
County of Maui
Department of Police
55 Mahalani Street
Wailuku, Hawai'i 96793

38. David Goode, Director
County of Maui
Department of Public Works
200 South High Street, 4th Floor
Wailuku, Hawai'i 96793

39. Don Medeiros, Director
County of Maui
Department of Transportation
2145 Kaohu Street
David Trask Building, Suite 102
Wailuku, Hawai'i 96793

40. Gladys Baisa, Acting Director
County of Maui
Department of Water Supply
200 South High Street, 5th Floor
Wailuku, Hawai'i 96793

41. Herman Andaya, Interim Emergency Management Officer
County of Maui
Emergency Management Agency
200 South High Street
Wailuku, Hawai'i 96793

42. Honorable Alika Atay
Maui County Council
200 South High Street
Wailuku, Hawai'i 96793

43. Honorable Michael White, Council Chair
Maui County Council
200 South High Street
Wailuku, Hawai'i 96793

44. Teena Rasmussen
County of Maui
Office of Economic Development
2200 Main Street, Suite 305
Wailuku, Hawai'i 96793

UTILITIES

45. Michael Grider, Manager, Engineering
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawai'i 96733

ORGANIZATIONS

46. Albert Perez, Executive Director
Maui Tomorrow
55 North Chuch Street, Suite A4
Wailuku, Hawai'i 96793

47. Donnie McGean
272 Halenani Drive
Wailuku, Hawai'i 96793

48. Richard "Dick" Mayer
1111 Lower Kimo Drive
Kula, Hawai'i 96790

49. Wallette Garcia Pellegrino
1420 Kilohi Street
Wailuku, Hawai'i 96793

50. Rick Papa, President
Attention: Tiana Raymondo
Kehalani Community Association
P.O. Box 1530
Wailuku, Hawai'i 96793

51. Debbie Cabebe, Chief Executive Officer
Maui Economic Opportunity
99 Mahalani Street
Wailuku, Hawai'i 96793

52. Barbara Kojima
Maui Lani Community Association
P. O. Box 1642
Kahului, Hawai'i 96733-1642

53. **University of Hawai'i at Mānoa**
Environmental Center
2500 Dole Street, Krauss Annex 19
Honolulu, Hawai'i 96822

54. Reid Kawabata
Waikapu Community Association
P.O. Box 3046
Wailuku, Hawai'i 96793

55. Glenn Adolpho
Waikapu Gardens Homeowners Association
P. O. Box 2390
Wailuku, Hawai'i 96793

56. **Wailuku Community Association**
40 Hoauna Street
Wailuku, Hawai'i 96793

57. **Wailuku Heights Extension Unit I Community Association**
P.O. Box 968
Wailuku, Hawai'i 96793

58. Lester Yano
Wailuku Heights Extension Unit II Community Association
c/o Hawaiiana Management Company Ltd.
140 Hoohana Street, Ste 208
Kahului, Hawai'i 96732

59. **FACE MAUI**
Father Terry Watanabe, President
25 Lipoa Street
Kīhei, Hawai'i 96753

60. Jayne Kinoshita
Email: jkskinos@gmail.com

61. Ernest Grace
Email: brahda808@msn.com

62. John and Janice Francis
531 Polulani Drive
Wailuku, Hawai'i 96793

63. Elaine Fujita
Email: gfmaui50@hotmail.com

64. Bob and Debby Takahashi
Email: melemeletakahashi@gmail.com

65. Waiehu Kou Phase 3 Association
c/o Commercial Properties of Maui, Inc.
1962 Wells Street, Suite B
Wailuku, Hawai'i 96793

66. Waiehu Kou Phase 4 Association
655 Kaumualii Street, Suite 1
Wailuku, Hawai'i 96793

67. Maui News
100 Mahalani Street
Wailuku, Hawai'i 96793

68. Wailuku Library
251 South High Street
Wailuku, Hawai'i 96793

APR 26 2018

DAVID Y. IGE
GOVERNOR

RODERICK K. BECKER
Comptroller

AUDREY HIDANO
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)1112.8

APR 25 2018

Ms. Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Draft Environmental Assessment for the
Proposed Wailuku Apartment Rental Housing Project
Wailuku, Maui, Hawaii
TMK: (2) 3-5-001:064

We have no comments to offer at this time as the proposed project does not impact any of the Department of Accounting and General Services' projects or existing facilities.

If you have any questions, your staff may call Ms. Dora Choy of the Public Works Division at 586-0488.

Sincerely,

RODERICK K. BECKER
Comptroller

c: Mr. Wade Shimabukuro, DAGS Maui District Office

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Roderick K. Becker, Comptroller
State of Hawai'i
Department of Accounting and General Services
P.O. Box 119
Honolulu, Hawai'i 96810-0119

SUBJECT: Draft Environmental Assessment for the Wailuku Apartment Rental Housing Project at Tax Map Key No. (2) 3-5-001:064 (P1112.8)

Dear Mr. Becker:

Thank you for your letter of April 25, 2018, acknowledging receipt of the subject Draft Environmental Assessment (EA). We appreciate your time reviewing the document, and understand that the proposed project does not impact any of the Department of Accounting and General Service's projects or facilities and that you do not have any comments at this time.

Thank you again for the Department's consideration of the Draft EA. A copy of your letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
K:\DATA\Legacy\Wailuku Afford Rental\Applications\Draft EA\Draft EA responses\DAGS.doc

MAY 0 3 2018

DAVID Y. IGE
GOVERNOR

DR. CHRISTINA M. KISHIMOTO
SUPERINTENDENT

STATE OF HAWAI`I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI`I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

April 30, 2018

Ms. Colleen Suyama
Munekiyo Hiraga
305 High Street
Wailuku, Hawaii 96793

Re: Draft Environmental Assessment (DEA) for the Proposed Affordable Housing Project by Legacy Wailuku, LLC, Wailuku, Maui, Hawaii
TMK: 3-5-001:064

Dear Ms. Suyama:

The Hawaii State Department of Education (HIDOE) has the following comments for the Draft Environmental Assessment (DEA) for the proposed Wailuku Affordable Housing Project (Project) by Legacy Wailuku, LLC. According to the DEA, the proposed Project will utilize Section 201-H, Hawaii Revised Statutes (HRS), for the development of 324 rental apartments comprised of 195 affordable units and 129 market rate units ranging in size from studio to three-bedroom units located at Wailuku, Maui, Hawaii, TMK: 3-5-001:064.

The DEA incorporates the HIDOE comments previously provided on this project by letter dated February 9, 2018. The DEA notes that the Project will comply with the requirements for school impact fees and will execute an Education Contribution Agreement with HIDOE. We would like to reiterate that Legacy Wailuku, LLC is encouraged to meet with HIDOE as early as possible to execute an Education Contribution Agreement.

The student enrollment numbers provided in, *Table 6. 2017 to 2018 DOE School Enrollment*, are official HIDOE numbers.

Thank you for the opportunity to comment. Should you have any questions, please contact Robyn Loudermilk, School Lands and Facilities Specialist of the Facilities Development Branch, Planning Section at (808) 784-5093 or via email at robyn_loudermilkAnotes.ki2.hi.us.

Respectfully,

Kenneth G. Masden, II
Public Works Manager
Planning Section

KGM:rll

c: Kathleen Dimino, Complex Area Superintendent, Baldwin-Kekaulike-Maui Complex

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Kenneth G. Masden, II, Public Works Manager
State of Hawai'i
Department of Education
Planning Section
P.O. Box 2360
Honolulu, Hawai'i 96804

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Masden:

Thank you for your letter of April 30, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document.

The project Applicant, Legacy Wailuku LLC, understands that the Draft Environmental Assessment (EA) addresses the Department of Education's previously provided comments as it relates to the Education Contribution Agreement, and student enrollment numbers.

Legacy Wailuku LLC, will be contacting your office shortly to discuss the process of completing the Education Contribution Agreement for the project.

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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APR 23 2018

DAVID Y. IGE
GOVERNOR
STATE OF HAWAII

DOUGLAS S. CHIN
LT. GOVERNOR
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

P.O. BOX 1879
HONOLULU, HAWAI'I 96805

April 13, 2018

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai`i 96793

Subject: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project; Wailuku Moku, Maui Island, Hawai`i

Dear Ms. Suyama:

The Department of Hawaiian Home Lands (DHHL) acknowledges receiving the request for comments on the Draft Environmental Assessment (EA) for the above-mentioned project. After reviewing the Draft EA, due to its lack of proximity to Hawaiian Home Lands, we do not anticipate any direct impacts to our lands or Beneficiaries resulting from the project.

We note that the DHHL highly encourages all agencies to consult with Hawaiian Homestead community associations and other (N)native Hawaiian organizations when preparing EA documents in order to better assess potential impacts to cultural and natural resources, access, and other rights of Native Hawaiians. We appreciate your effort in this regard and add that because the Wai`ehu Kou, Phase 4 community does not currently have an active association, the DHHL has chosen to respond to your request for input.

Regarding the proposed action, we understand that the project entails the development of 324 apartment rental units, 195 of which will be affordable units, in Wailuku. While the proposed project will not directly impact Hawaiian Home Lands or DHHL Beneficiaries, the DHHL firmly supports all affordable housing projects which provide housing opportunities for Native Hawaiian and local families.

Mahalo for the opportunity to provide comments. If you have any questions, please call Bryan Esmeralda, Maui Island Liaison for the DHHL Planning Office at 760-5125 or contact via email at bryan.k.esmeralda@hawaii.gov.

Sincerely,

M. Kaleo Manuel
Acting Planning Program Manager

MUNEKIYO HIRAGA
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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

M. Kaleo Manuel, Acting Planning Program Manager
State of Hawai'i
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, Hawai'i 96805

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Manuel:

Thank you for your letter of April 13, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we have summarized your comments and provide the following responses.

Comment No. 1:

The Department of Hawaiian Home Lands (DHHL) highly encourages consultation with Hawaiian Homestead community associations and Native Hawaiian Organizations when preparing EA documents in order to better assess potential impacts to cultural and natural resources, access, and other rights of Native Hawaiians.

Response: While we understand that the proposed Wailuku Apartment Rental Housing Project is not in proximity to DHHL lands, we have included, as part of the Environmental Assessment (EA) document, a Cultural Impact Assessment (CIA) for the project. The CIA's consultation process included correspondence with a number of cultural practitioners, individuals, and organizations having potential knowledge of the project area. The CIA includes results of interviews conducted with individuals familiar with the project area.

Comment No. 2:

The DHHL supports affordable housing projects which provide housing opportunities for Native Hawaiian and local families.

Response: The Applicant appreciates the Department's position and looks forward to helping to address the critical community housing need.

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me at email erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,



Erin Mukai, Manager

EM:yp
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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APR 26 2018

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

EPO 18-107

April 19, 2018

Mr. Michael Munekiyo, AICP
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793
Email: planning@munekiyohiraga.com

Dear Mr. Munekiyo:

SUBJECT: Draft Environmental Assessment (DEA) for Proposed Wailuku Apartment Rental Housing Project, Maui
TMK: (2) 3-5-001:064

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your DEA to our office via the OEQC link:
http://oeqc2.doh.hawaii.gov/EA_EIS_Library/2018-04-08-MA-DEA-Wailuku-Apartment-Rental-Housing.pdf

We understand from the OEQC publication form project summary that *"Legacy Wailuku LLC is proposing to develop 324 affordable and market rate apartment rental units pursuant to Section 201 H-38, HRS. The project will consist of 195 affordable units and 129 market rate units located within nine (9) three-story buildings consisting of studios, one-, two-, and three-bedroom units with floor areas ranging from approximately 400 square feet to 950 square feet with 661 parking stalls. The project will also include a community center/leasing office building, swimming pool, barbeque area, and four (4) children play areas."*

Hawaii's environmental review laws require Environmental Assessments (EAs) and Environmental Impact Statements (EISs) to consider health in the discussion and the mitigation measures to reduce negative impacts. In its definition of 'impacts,' §11-200-2, Hawaii Administrative Rules (HAR) includes health effects, whether primary (direct), secondary (indirect), or cumulative. Further, §11-200-12(b)(5), HAR, lists public health as one of the criteria for determining whether an action may have a significant impact on the environment.

We advocate that you consider health from a broad perspective; one that accounts for the social, economic, and environmental determinants of health and wellbeing. Community well-being can be impacted by access to physical activity, health care, feelings of social connectedness and safety. Design solutions that take these factors into consideration positively contribute to the social determinants of health in a community, improving the well-being of those who live there by influencing health promoting behaviors. Social determinants contribute to preventable chronic diseases such as asthma, diabetes, obesity, and cardiovascular disease.

An example of social influences include access to safe pedestrian corridors such as pathways, sidewalks, bike lanes, greenways and open space. §11-200-17(h), HAR, says EISs must discuss how proposed actions may conform or conflict with any policies for the affected area. This includes Hawaii's 2009 Complete Streets law, which requires the state and counties to establish policies to accommodate all users of the road, no matter age, ability, or mode of transportation. In 2015, Hawaii passed Act 97 which amended Hawaii's Renewable Portfolio Standards by setting a goal for Hawaii to become one hundred percent renewable by the year 2045. To reach this goal Hawaii should transform its transportation sector from the use of fossil fuels to renewable fuel, electric vehicles (EV)s, and public

transit systems including bikeshare programs. To address "range anxiety" and facilitate the adoption of EVs, it is essential that EV charging stations be added to any planned parking areas open to the EV driving public. Plans should strive to encourage the use of personal bicycles though the development of designated bike lanes and class A bike trails. All efforts should be made to reduce harmful vehicle emissions, reduce vehicle miles travelled (VMT's), encourage alternative modes of transport and increase physical activity.

In the development and implementation of all projects, EPO strongly recommends regular review of State and Federal environmental health land use guidance. State standard comments to support sustainable healthy design are provided at: http://health.hawaii.gov/epo/landuse. Projects are required to adhere to all applicable standard comments.

If you haven't already, EPO recommends that you review the new Healthy Communities Policy Guide: https://planning-org-uploaded-media.s3.amazonaws.com/document/Healthy-Communities-Policy-Guide.pdf, Plan4health website: http://plan4health.us and the free, on-demand, six part Plan4Health webinar series available on the American Planning Association website.

EPO also encourages you to examine and utilize the Hawaii Environmental Health Portal at: https://eha-cloud.doh.hawaii.gov. This site provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings.

We suggest you review the requirements of the Clean Water Branch (Hawaii Administrative Rules {HAR}, Chapter 11-54-1.1, -3, 4-8) and/or the National Pollutant Discharge Elimination System (NPDES) permit (HAR, Chapter 11-55) at: http://health.hawaii.gov/cwb. If you have any questions, please contact the Clean Water Branch (CWB), Engineering Section at (808) 586-4309 or cleanwaterbranch@doh.hawaii.gov. If your project involves waters of the U.S., it is highly recommended that you contact the Army Corps of Engineers, Regulatory Branch at: (808) 835-4303.

Injection wells used for the subsurface disposal of wastewater, sewage effluent, or surface runoff are subject to environmental regulation and permitting (HAR, Chapter 11-23, "Underground Injection Control {UIC}"). DOH approval must be obtained before any injection well construction commences. A UIC permit must be issued before any injection well operation occurs. For specific questions please email sdwb@doh.hawaii.gov or call (808) 586-4258.

Please note that all wastewater plans must conform to applicable provisions (HAR, Chapter 11-62, "Wastewater Systems"). We reserve the right to review the detailed wastewater plans for conformance to applicable rules. Should you have any questions, please review online guidance at: http://health.hawaii.gov/wastewater and contact the Planning and Design Section of the Wastewater Branch (WWB) at (808) 586-4294.

If temporary fugitive dust emissions could be emitted when the project site is prepared for construction and/or when construction activities occur, we recommend you review the need and/or requirements for a Clean Air Branch (CAB) permit (HAR, Chapter 11-60.1 "Air Pollution Control"). Effective air pollution control measures need to be provided to prevent or minimize any fugitive dust emissions caused by construction work from affecting the surrounding areas. This includes the off-site roadways used to enter/exit the project. The control measures could include, but are not limited to, the use of water wagons, sprinkler systems, and dust fences. For questions contact the Clean Air Branch via e-mail at: Cab.General@doh.hawaii.gov or call (808) 586-4200.

Any waste generated by the project (that is not a hazardous waste as defined in state hazardous waste laws and regulations), needs to be disposed of at a solid waste management facility that complies with the applicable provisions (HAR, Chapter 11-58.1 "Solid Waste Management Control"). The open burning of any of these wastes, on or off site, is strictly prohibited. You may wish you review the Minimizing Construction & Demolition Waste

Management Guide at: http://health.hawaii.gov/shwb/files/2016/05/constdem16.pdf Additional information is accessible at: http://health.hawaii.gov/shwb. For specific questions call (808) 586-4226.

If noise created during the construction phase of the project may exceed the maximum allowable levels (HAR, Chapter 11-46, "Community Noise Control") then a noise permit may be required and needs to be obtained before the commencement of work. Relevant information is online at: http://health.hawaii.gov/irhb/noise EPO recommends you contact the Indoor and Radiological Health Branch (IRHB) at (808) 586-4700 with any specific questions.

A phase I Environmental Site Assessment (ESA) and site investigation should be conducted for residential development or redevelopment projects in current or formerly used industrial areas and on formerly and currently zoned agricultural land used for growing sugar, pineapple or other agricultural products. If the investigation shows that a release of petroleum, hazardous substance, pollutants or contaminants may have occurred at the site, the site should be properly characterized through an approved Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response Office (HEER) soil and/or groundwater sampling plan. Please refer to Sections 3 and 4 of the HEER Office Technical Guidance Manual http://www.hawaiidoh.org.

If the site is found to be contaminated, then all removal and remedial actions to clean up hazardous substance or oil releases by past and present owners/tenants must comply with State Law (HRS, Chapter 128D, "Environmental Response Law", Chapter 451, "State Contingency Plan"). To identify HEER records related to the property, visit http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/public-records. For information on site assessment and cleanup programs review: http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/site-assessment-and-cleanup-programs. Any specific questions should be directed to the HEER office at (808) 586-4249.

The property may harbor vectors which may disperse to the surrounding areas when the site is cleared. In accordance with Title 11, HAR, Chapter 11-26, "Vector Control", the applicant shall ascertain the presence or absence of rodents on the property. Should the presence of vectors be determined, the applicant shall eradicate the vectors prior to clearing the site.

The Hawaii Disability and Communication Access Board (DCAB) recommends the inclusion of access for persons with disabilities through all phases of design and construction. New construction and alteration work shall comply with all applicable accessibility requirements. Projects covered by §103-50, Hawaii Revised Statutes, and HAR Title 11 Chapter 216 shall seek advice and recommendations from DCAB on any construction plans prior to commencing with construction. If you have any questions please contact DCAB at (808) 586-8121 or dcab@doh.hawaii.gov.

To better protect public health and the environment, the U.S. Environmental Protection Agency (EPA) has developed an environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. EPO encourages you to explore, launch and utilize this powerful tool in planning your project. The EPA EJSCREEN tool is available at: http://www.epa.gov/ejscreen.

We hope this information is helpful. If you have any questions please contact us at DOH.epo@doh.hawaii.gov or call us at (808) 586-4337. Thank you for the opportunity to comment.

Mahalo nui loa,

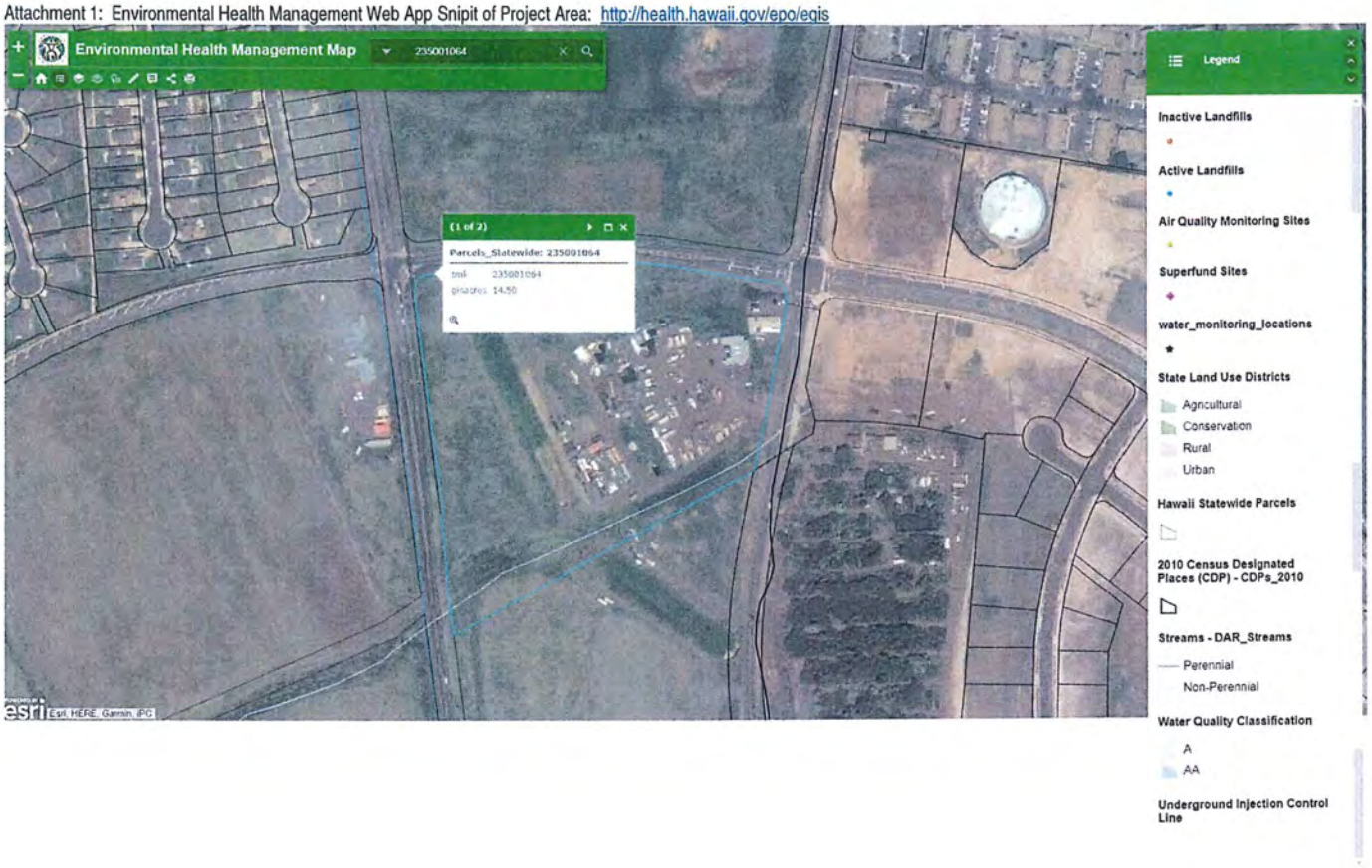
Laura Leialoha Phillips McIntyre, AICP
Environmental Planning Office

LM:nn

c: Linda Schatz, Legacy Wailuku, LLC (via email: lindaschatz@schatzcollaborative.com)
Ken T. Takashi, HHFDC (via email: ken.t.takashi@hawaii.gov)
DOH: DDEH, DHO Maui, EMD, CWB, SDWB, WWB, SHWB, CAB, HEER, VCB, DCAB {via email only}

Attachment 1: Environmental Health Management Web App Snipit of Project Area: http://health.hawaii.gov/epo/egis
Attachment 2: U.S. EPA EJSCREEN Report for Project Area

Attachment 1: Environmental Health Management Web App Snipit of Project Area: http://health.hawaii.gov/epo/eqis



Attachment 2: U.S. EPA EJSCREEN Report for Project Area

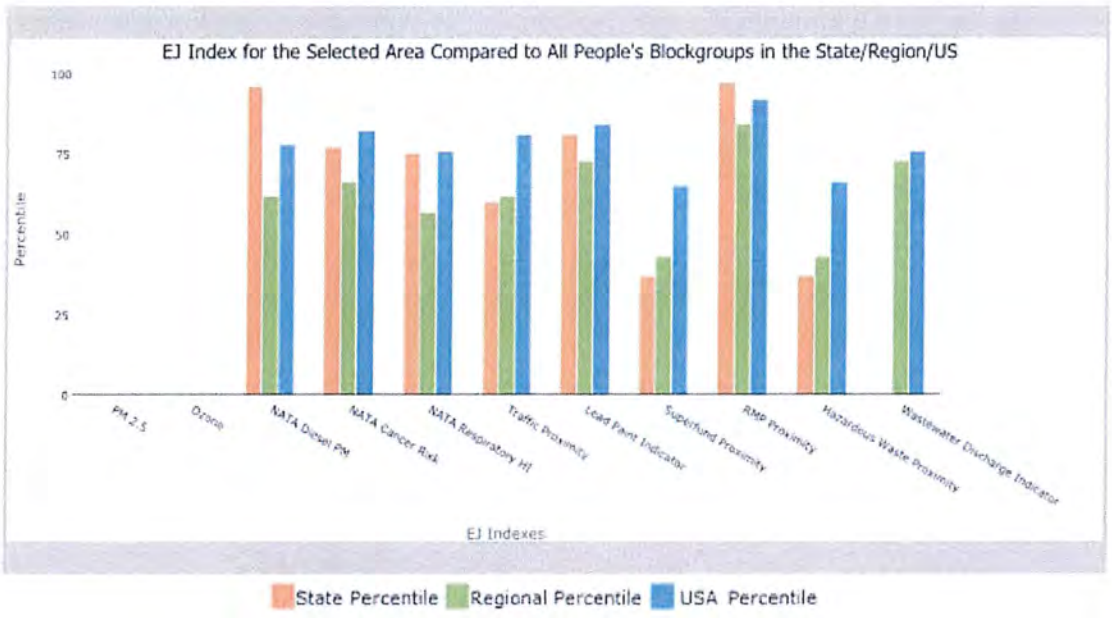
EJSCREEN Report (Version 2017)

1 mile Ring Centered at 20.870508,-156.501664, HAWAII, EPA Region 9

Approximate Population: 10,501

Input Area (sq. miles): 3.14

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	N/A	N/A	N/A
EJ Index for Ozone	N/A	N/A	N/A
EJ Index for NATA* Diesel PM	96	62	78
EJ Index for NATA* Air Toxics Cancer Risk	77	66	82
EJ Index for NATA* Respiratory Hazard Index	75	57	76
EJ Index for Traffic Proximity and Volume	60	62	81
EJ Index for Lead Paint Indicator	81	73	84
EJ Index for Superfund Proximity	37	43	65
EJ Index for RMP Proximity	97	84	92
EJ Index for Hazardous Waste Proximity	37	43	66
EJ Index for Wastewater Discharge Indicator	N/A	73	76



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJSCREEN Report (Version 2017)

1 mile Ring Centered at 20.870508,-156.501664, HAWAII, EPA Region 9

Approximate Population: 10,501

Input Area (sq. miles): 3.14



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2017)

1 mile Ring Centered at 20.870508,-156.501664, HAWAII, EPA Region 9

Approximate Population: 10,501

Input Area (sq. miles): 3.14

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m^3)	N/A	N/A	N/A	9.9	N/A	9.14	N/A
Ozone (ppb)	N/A	N/A	N/A	41.8	N/A	38.4	N/A
NATA* Diesel PM (µg/m^3)	0.444	0.149	94	0.978	<50th	0.938	<50th
NATA* Cancer Risk (lifetime risk per million)	32	34	51	43	<50th	40	<50th
NATA* Respiratory Hazard Index	0.89	1	49	2	<50th	1.8	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	170	1000	51	1100	42	590	59
Lead Paint Indicator (% Pre-1960 Housing)	0.16	0.16	60	0.24	53	0.29	46
Superfund Proximity (site count/km distance)	0.0061	0.1	22	0.15	5	0.13	1
RMP Proximity (facility count/km distance)	1.6	0.39	96	0.98	82	0.73	87
Hazardous Waste Proximity (facility count/km distance)	0.0063	0.1	26	0.12	2	0.093	2
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	0.04	N/A	13	59	30	40
Demographic Indicators							
Demographic Index	54%	51%	59	47%	61	36%	77
Minority Population	81%	77%	46	59%	71	38%	85
Low Income Population	25%	26%	53	36%	38	34%	39
Linguistically Isolated Population	3%	6%	47	9%	33	5%	61
Population With Less Than High School Education	6%	9%	47	17%	29	13%	33
Population Under 5 years of age	7%	6%	62	7%	57	6%	61
Population over 64 years of age	14%	16%	43	13%	64	14%	55

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Laura Leialoha Phillips McIntyre, AICP
State of Hawai'i
Department of Health
Environmental Planning Office
P.O. Box 3378
Honolulu, Hawai'i 96801-3378

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064 (EPO 18-107)

Dear Ms. McIntyre:

Thank you for your letter of April 19, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document (EPO 18-107). On behalf of the Applicant, Legacy Wailuku LLC, we have summarized each of your comments and provide the following responses.

Comment:

We advocate that you consider health from a broad perspective; one that accounts for the social, economic and environmental determinants of health and wellbeing.

Response: In keeping with the examples cited in your letter, the project will provide 6-foot (ft.) wide pedestrian sidewalks along Kuikahi Drive and Waiale Road, together with crosswalks with warning flashers, and a curbed pedestrian refuge island at Kuikahi Drive. The walkability facilitated by these improvements will encourage pedestrian access to the Kehalani Village Center located to the north of the project. As well, the existing signalized intersection at Waiale Road and Kuikahi Drive provides for safe pedestrian access to the Maui Lani Village Center and the bus stop located nearby, along Waiale Road.

In addition, the project will provide a 6-ft. wide bike lane along both Kuikahi Drive and Waiale Road to facilitate bicycle connectivity to neighboring residential and commercial areas.

Comment:

EPO strongly recommends regular review of State and Federal environmental health land use guidance.

Response: We have reviewed the subject webpage as well as the standard conditions which are linked to the page. The Applicant will comply with applicable conditions set forth by the various divisions and branches of the Department.

Comment:

EPO recommends that you review the new Healthy Communities Policy Guide website and the Plan4Health webpage of the American Planning Association.

Response: Consistent with the intent of the healthy communities policy framework of improving community health and quality of living through planning, the proposed Wailuku Apartment Rental Housing project will provide a safe living environment with access to services which will support individual and family well-being. The proposed project will provide new opportunities for those in need of housing, the lack of which creates conditions detrimental to the goal of being a healthy community.

We have also reviewed the American Planning Association's Plan4Health webpage. As a general principle, the proposed project recognizes that the built environment impacts all aspects of our health. The location of the project, in proximity to services and infrastructure supports living in a safe environment, while providing access to active living opportunities such as nearby parks and playgrounds.

Comment:

The EPO encourages you to examine and utilize the Hawaii Environmental Health Portal.

Response: A copy of your letter has been provided to the Applicant for review and referral to the Hawaii Environmental Health Portal. Project consultants are familiar with the tools and resources associated with the various Departmental permits referenced at the portal including, as may be applicable, National Pollutant Elimination System (NPDES) General Permit, Noise Permit, and Hawaii Disability and Communication Access Board (DCAB) review.

Comment:

Review the requirements of the Clean Water Branch and NPDES permit.

Response: Project consultants are familiar with the requirements of Hawai'i Administrative Rules (HAR) Chapter 11-54 and Chapter 11-55. The project will comply with NPDES permitting requirements. The project does not affect waters of the United States.

Comment:

Comply with Underground Injection Control (UIC) requirements (HAR, Chapter 11-23).

Response: As applicable, the project will comply with HAR, Chapter 11-23 relating to UIC permitting.

Comment:

Plans must conform to applicable provisions of HAR, Chapter 11-62, relating to Wastewater Systems.

Response: As applicable, the project will comply with HAR, Chapter 11-62.

Comment:

Review the need for and requirements of HAR, Chapter 11-60.1, relating to Air Pollution Control.

Response: Project plans and specifications will be developed to ensure that appropriate mitigation for fugitive dust mitigation is provided, in compliance with HAR, Chapter 11-60.1.

Comment:

Any waste generated by the project shall be disposed at a solid waste management facility that complies with applicable provisions of HAR, Chapter 11-58.1, relating to Solid Waste Management Control.

Response: Project plans and specifications will be developed to ensure that the contractor appropriately disposes of construction waste materials in accordance with HAR, Chapter 11-58.1. To the extent practicable, construction materials will be reused to minimize waste generation. There will be no open burning of waste occurring in connection with project construction.

Comment:

The project shall comply with HAR, Chapter 11-46 relating to Community Noise Control.

Response: Construction noise will be mitigated through Best Management Practices, such as the proper maintenance of equipment. As may be required, the contractor will obtain a noise permit pursuant to HAR, Chapter 11-46.

Comment:

A Phase I Environmental Site Assessment (ESA) should be conducted for residential development in current or formerly used industrial areas and on formerly and currently zoned agricultural lands used for growing sugar, pineapple or other agricultural products.

Response: A Phase I ESA was conducted for the subject property by Bureau Veritas North America, Inc. The ESA, dated March 7, 2016, was conducted to determine if the site may be contaminated with hazardous or toxic substances or wastes resulting from the past site activities, in particular sugar cane cultivation.

Site reconnaissance, as well as records review for the subject property and the surrounding area were conducted and revealed no evidence of recognized environmental conditions, as defined by American Society for Testing and Materials (ASTM), in connection with the property. The ESA noted that agricultural chemicals were not detected at or above regulatory levels. The ESA noted that this historically recognized environmental condition is not considered a current recognized environmental condition because the subject property has received a "No Further Action Determination" letter from the Department of Health (DOH), Hazard Evaluation and Emergency Response (HEER) Office with regards to elevated agricultural chemicals in the soil.

Comment:

The property may harbor vectors which may disperse to surrounding areas when the site is cleared, the project shall comply with HAR, Chapter 11-26, relating to Vector Control.

Response: The project's contractor will comply with applicable provisions of HAR, Chapter 11-26.

Comment:

New construction shall comply with accessibility requirements of the Hawaii Disability and Communication Access Board (DCAB).

Response: The project will comply with applicable requirements of DCAB.

Comment:

EPO encourages the applicant to explore, launch and utilize the Environmental Protection Agency's (EPA) environmental justice mapping and screening tool (EJSCREEN).

Response: We have reviewed the EPA's EJSCREEN and recognize the importance of environmental justice concerns as described in the Technical Guidance for Assessing Environmental Justice in Regulatory Analysis.

We note that construction permits review will include the Department of Health to ensure continue regulatory oversight through the project development phase of implementation. Thank you again for providing comments on the Draft Environmental Assessment (EA). A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,



Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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DAVID Y. IGE
GOVERNOR OF HAWAII

MAY 07 2018

SUZANNE D. CASE
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

May 7, 2018

Munekiyo & Hiraga, Inc.
Attn: Ms. Colleen Suyama
Senior Associate
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: planning@munekiyohiraga.com

Dear Ms. Suyama:

SUBJECT: Draft Environmental Assessment for the Proposed **Wailuku Apartment Rental Housing Project** located at Wailuku, Island of Maui; TMK: (2) 3-5-001:064

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) Engineering Division and (b) Land Division – Maui District on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at (808) 587-0417. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosures
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

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

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DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 12, 2018

MEMORANDUM

FROM

TO:

DLNR Agencies:
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
_X_Engineering Division
___Div. of Forestry & Wildlife
___Div. of State Parks
_X_Commission on Water Resource Management
___Office of Conservation & Coastal Lands
_X_Land Division – Maui District
_X_Historic Preservation

To

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Assessment for the Proposed **Wailuku Apartment Rental Housing Project**
LOCATION: Wailuku, Island of Maui; TMK: (2) 3-5-001:064
APPLICANT: Munekiyo Hiraga on behalf of Legacy Wailuku, LLC

Transmitted for your review and comment is information on the above-referenced subject matter. We would appreciate your comments by **May 4, 2018.**

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

additional

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

Signed: _____

Print Name: Carty S. Chang, Chief Engineer

Date: 4/19/18

cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

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

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DEPT OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 12, 2018

2018 APR 16 PM 3:01

MEMORANDUM

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
_X_Engineering Division
___Div. of Forestry & Wildlife
___Div. of State Parks
_X_Commission on Water Resource Management
___Office of Conservation & Coastal Lands
_X_Land Division – Maui District
_X_Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Assessment for the Proposed **Wailuku Apartment Rental Housing Project**
LOCATION: Wailuku, Island of Maui; TMK: (2) 3-5-001:064
APPLICANT: Munekiyo Hiraga on behalf of Legacy Wailuku, LLC

Transmitted for your review and comment is information on the above-referenced subject matter. We would appreciate your comments by **May 4, 2018.**

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

( ) We have no objections.
(X) We have no comments.
( ) Comments are attached.

Signed: _____

Print Name: Daniel Ornellas

Date: 4/23/18

cc: Central Files

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Russell Y. Tsuji, Land Administrator
State of Hawai'i
Department of Land and Natural Resources
Land Division
P.O. Box 621
Honolulu, Hawai'i 96809

SUBJECT: Draft Environmental Assessment (EA) for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Tsuji:

Thank you for your letter of May 7, 2018, providing comments from the Department's Engineering Division and Land Division – Maui District on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document.

The project Applicant, Legacy Wailuku LLC, understands that the Engineering Division has no additional comments to offer and the Land Division – Maui District has no comments on the Draft Environmental Assessment (EA).

Thank you again for providing comments on the Draft EA. A copy of your letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
K:\DATA\Legacy\Wailuku Afford Rental\Applications\Draft EA\Draft EA responses\DLNR Eng and Land-Maui.doc

DAVID Y. IGE
GOVERNOR OF
HAWAII

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

ROBERT K. MASUDA
FIRST DEPUTY

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

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

April 30, 2018

IN REPLY REFER TO:
Log No. 2018.00985
Doc No. 1804MBF21
Archaeology

Ken Takahashi, Project Manager
Hawaii Housing Finance and Development Corporation
ken.t.takahashi@hawaii.gov

Dear Mr. Takahashi,

SUBJECT: **Chapter 6E-42 Historic Preservation Review –**
Archaeological Assessment Report for a 15.0-acre Parcel Located along Waiale Road
Wailuku Ahupua'a, Wailuku District, Maui Island
TMK: (2) 3-5-001:064

This letter provides the State Historic Preservation Division's (SHPD's) review of the revised draft report, *Final Archaeological Assessment Report for a 15.0-acre Parcel Located along Waiale Road, Wailuku Ahupua'a, Wailuku District, Maui Island, TMK: (2) 3-5-001:064* (O'Claray-Nu et al., May 2017; revised February 2018). Our office received this revised draft report on April 23, 2018.

The proposed development is an affordable residential housing project, including residential structures, access roads and associated infrastructural improvements. The subject area was previously disturbed by grubbing, grading and stockpiling of material from sugarcane cultivation and construction of a retention ditch in the western half of the parcel. The State's Hawai'i Housing Finance and Development Corporation (HHFDC) is processing a 201H-38 affordable housing project application for Legacy Wailuku, LLC, for its Wailuku Apartment Rental Housing Project. The HHFDC has determined that the project is not a federal undertaking as defined by 36 CFR 800.16(y). The Draft Environmental Assessment (EA) for the project was filed with the Office of Environmental Quality Control (OEQC) and published in the Environmental Notice on April 8, 2018.

No historic properties were identified in the project area. The subject archaeological inventory survey (AIS) is presented as an archaeological assessment (AA) report due to negative findings. The AIS field work involved full pedestrian survey of the project area and subsurface testing involving eleven stratigraphic trenches.

The SHPD's determination is that the AIS field work was inadequate for the following reasons:

(1) The AIS field work was conducted without a detailed scope of work identifying the full range of proposed project development. The AA report does not indicate the scope or location of proposed project work other than the retention basin. As such, it is not possible for either the permitting agency or the SHPD to make an informed project effect determination.

(2) The AIS method for selecting the location of trenches was *systematic random sampling*. However, the trench layout information provided in Figure 11 is unlikely to reflect implementation of a systematic random sampling strategy.

(3) The AIS report provides conflicting information about appropriateness of *systematic random sampling*, including text indicating that this strategy is not recommended in most archaeological situations. Specifically, probability sampling is not reliable as a "discovery" technique for archaeological survey using trenching methods. When trenching is used to collect archaeological data, there are unavoidable complications with the representative sample generated by a probabilistic sampling technique, whether

simple, systematic or stratified. These complications usually arise out of problems with spatial autocorrelation and small sample size. There is an inherent difficulty involved with capturing a statistically significant sample from limited data points.

(4) The testing strategy used in the AIS, in this case, eleven "randomly" sampled trenches across a fifteen-acre parcel, does not provide statistically significant data from which to draw a representative sample and make conclusions about the nature of possible archaeological resources in project area. Given that the primary emphasis of the subject archaeological inventory survey, as stated in the introduction of the AA report, was to ascertain the presence or absence of archaeological resources.

(5) A non-probabilistic sampling technique would be better suited to a trenching methodology, taking into account the AIS requirements that cultural-historic background research be conducted and archaeological previous studies be reviewed for the project area and ahupua'a, in order to identify information about prior land use of the area, the nature and distribution of previously-identified historic properties, to aid in developing an appropriate testing strategy, one informed by previously-recorded historical and archaeological data, not on "random" testing.

(6) The AA report provides inadequate information for the SHPD to determine the potential for the proposed project to adversely affect historic properties. The subject parcel is positioned within a high-probability area for encountering undocumented cultural resources. The parcel is located near several burial features (Sites 50-50-04-2916, 50-50-04-5965, 50-50-04-5966, 50-50-04-5680, 50-50-04-6261 and 50-50-04-6573). It also is located near three documented historic properties consisting of a road bed (Site 50-50-04-5963), a sugarcane flume (Site 50-50-04-5967), and the Kama Ditch (Site 50-50-04-5474).

Based on the afore-mentioned inadequacies of the AIS conducted by Archaeological Services of Hawaii (ASH), the SHPD indicates the following:

(1) SHPD accepts the draft AA report as meeting the minimum requirements for documenting the AIS field work conducted, but due to the inadequacy of the field work,
(2) SHPD requests the project proceed under an archaeological monitoring for identification purposes, to ensure any historic properties encountered during construction are adequately identified, documented, assessed for significance and that adequate mitigation occurs.

Pursuant to HAR §13-276-5, the AA report is accepted; however, the final shall reflect thorough copy editing to address all grammatical errors and to address all regulatory incorrect statements, including the statement that an archaeological assessment was performed. An AA is an AIS report with negative findings, it is not a type of survey. Please send two hard copies of the document, clearly marked FINAL, along with a copy of this review letter and a text-searchable PDF version on CD to the Kapolei SHPD office, attention SHPD Library.

As indicated above, the SHPD requests the project proceed under archaeological monitoring, and requires the following stipulations be included in the archaeological monitoring plan:

- Detailed description of the project scope of work and project maps showing the entirety of the project area and project work;
- The archaeological monitor shall conduct pre-construction coordination briefing and additional briefings, as needed, if construction and/or archaeological personnel changes occur;
- On-site archaeological monitoring shall be conducted during all project-related ground disturbing activities;
- Provide photographic documentation of the project area prior to project initiation, during project work, and at the completion of project work;
- Specify one monitor per heavy machinery in operation;
- In the event that non-burial historic properties are identified, SHPD shall be notified of the find and consulted regarding documentation, assessment of significance, and treatment in accordance with HAR §13-279 and HAR §13-280;
- If human remains are identified, work will cease in the vicinity, SHPD will be notified, and treatment shall be in compliance with procedures specified in HRS 6E-43.6, HAR §13-300-40, and SHPD directives;
- Documentation of non-burial cultural deposits shall include recording stratigraphy using USDA soil descriptions, recordation of feature contents through excavation or sampling of features, representative

scaled profile drawings, photo documentation (with N arrow and scales), and appropriate laboratory analysis of collected samples and artifacts;
- Laboratory analysis may include but not be limited to wood taxa identification, radiocarbon dating, pollen analysis, invertebrate and vertebrate identification. Charcoal samples shall be submitted for wood taxa identification prior to radiocarbon dating;
- An archaeological monitoring report meeting the requirements of HAR §13-279-5 shall be prepared and submitted to SHPD for review within 60 days of completion of archaeological monitoring, unless a longer report preparation period is agreed to in writing by SHPD;
- Final curation and archiving of any collections shall be determined in consultation with the SHPD and the landowner; and
- Departure from these provisions shall occur only in consultation with and written concurrence from SHPD.

The SHPD anticipates receiving for review and acceptance an archaeological monitoring plan meeting the requirements of HAR 13-279-4 prior to project initiation. A list of permitted archaeological firms is provided on the SHPD website at: http://dlnr.hawaii.gov/shpd/about/branches/archaeology.

Please contact Dr. Matthew Barker Fariss at (808) 243-4626, or at matthew.b.fariss@hawaii.gov, if you have any questions about this letter.

Aloha,

Alan Downer

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

cc: Erin Mukai Munekiyo Hiraga
erin@munekiyohiraga.com

Linda Schatz, Legacy Wailuku, LLC
lindaschatz@schatzcollaborative.com

Jeff Pantaleo, Principal Investigator
Archaeological Services of Hawai'i (ASH)
jpanta4149@aol.com

Lisa Rotunno-Hazuka
Archaeological Services of Hawai'i (ASH)
lisa@ashmaui.com

DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

In reply, refer to:

18: DEV/087

June 25, 2018

Alan S. Downer, Ph.D., Administrator
State of Hawai'i
Department of Land and Natural Resources
State Historic Preservation Division
Kakuhihewa Building
601 Kamokila Blvd., Suite 555
Kapolei, Hawai'i 96707

SUBJECT: Chapter 6E-42 Historic Preservation Review – Archaeological Assessment Report for a 15.0-Acre Parcel Located Along Waiale Road, Wailuku Ahupua'a, Wailuku District, Maui Island, Tax Map Key No. (2)3-5-001:064 (Log No. 2018.00985; Doc No. 1804MBF21 Archaeology)

Dear Mr. Downer:

Thank you for your letter of April 30, 2018, providing comments on the Archaeological Assessment (AA) for the Wailuku Apartment Rental Housing Project. The Applicant, Legacy Wailuku LLC, has informed the project archaeologist of the following:

1. A final AA report reflecting editing to address all grammatical errors and to address all regulatory incorrect statements shall be prepared. The archaeologist will provide two (2) hard copies of the document, clearly marked "Final", along with a copy of your April 30, 2018 review letter and a text-searchable PDF version on CD to the State Historic Preservation Division's (SHPD) Kapolei, SHPD Library.

2. An Archaeological Monitoring Plan (AMP) will be prepared by the project archaeologist in accordance with Hawai'i Administrative Rules Section 13-279-4. The AMP will be submitted to the SHPD for review.

Thank you again for providing your comments on the AA. Since the AA was included in the project's Draft Environmental Assessment (EA), a copy of your April 30th letter, along with this response letter will be included in the Final EA. Should you have any questions regarding our

responses, please feel free to contact Ken Takahashi at ken.t.takahashi@hawaii.gov (tel. 808-587-0547), or the EA consultant, Erin Mukai at erin@munekiyohiraga.com (tel. 808-244-2015).

Sincerely,

Craig K. Hirai,
Executive Director

cc: Linda Schatz, Schatz Collaborative
Vince Bagoyo, Bagoyo Development Consulting
Lisa Rotunno-Hazuka, Archaeological Services Hawaii
Erin Mukai, Munekiyo Hiraga

MAY 14 2018

DAVID Y. IGE
GOVERNOR

JADE T. BUTAY
DIRECTOR

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

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

IN REPLY REFER TO:
DIR 0400
STP 8.2418

May 9, 2018

Ms. Colleen Suyama
Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Wailuku Apartment Rental Housing Project
Draft Environmental Assessment (DEA)
Wailuku, Maui, Hawaii
TMK: (2) 3-5-001:064

Thank you for the opportunity to review the subject DEA. The Department of Transportation (DOT) understands that the project consists of 195 affordable units and 129 market rate units, recreational areas, a community center/leasing office building, and approximately 661 parking stalls on approximately 14.416 acres of land.

DOT previously commented on the project in the attached letter dated February 27, 2018 (STP 8.2337). Based on the information provided, our concerns have been adequately addressed and the project does not appear to have any significant impacts to State transportation facilities.

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

Sincerely,

JADE T. BUTAY
Director of Transportation

Attachment

DAVID Y. IGE
GOVERNOR

JADE T. BUTAY
INTERIM DIRECTOR

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

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

IN REPLY REFER TO:
DIR 0130
STP 8.2337

February 27, 2018

Ms. Colleen Suyama
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Wailuku Affordable Housing Project, Section 201H
Early Consultation for Draft Environmental Assessment (DEA)
Wailuku, Maui, Hawaii
TMK: (2) 3-5-001:064

The Department of Transportation (DOT) comments are as follows:

Airports Division

1. The proposed project site is located approximately four miles from Runway 2 of the Kahului Airport (OGG). Any proposed development within five miles of an airport is subject to the State of Hawaii, Office of Planning, Technical Assistance Memorandum.

   You can find out more details through the following link:
   http://files.hawaii.gov/dbedt/op/docs/TAM-FAA-DOT-Airports_08-01-2016.pdf.

   If any of the project features attract hazardous wildlife, create glint and glare hazard, or create an aerial obstruction hazard to flight operations, the Applicant/Property Owner must coordinate with proper officials and agencies and must implement appropriate mitigation to address the hazards.

2. Standing water in the existing open drainage channel shall be eliminated and water must be drained or pumped out within 48 hours of peak weather events to eliminate potential hazardous wildlife attractants that may impact aircraft operations at OGG.

   It is strongly recommended that you consult the Federal Aviation Administration Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports* for guidance.

3. The project is located outside of the 55 DNL (day-night average noise level) contours as shown on the Five-Year (1998) No Mitigation Noise Exposure Map for Kahului Airport.

   The Applicant and future residents should be aware of the proximity of the airport and the potential of single event noise from aircraft operations.

Highways Division

1. A traffic study should be prepared by a traffic engineer licensed in the State of Hawaii and should be included in the DEA.

   a. The traffic study should evaluate any local impacts to the Honoapiilani Highway and nearby State facilities attributed to the project.

   b. An evaluation should be included for regional traffic impacts of the proposed project and potential fair share contribution to traffic improvements.

If there are any questions, please contact Mr. Blayne Nikaido of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7979.

Sincerely,

JADE T. BUTAY
Interim Director of Transportation

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Jade T. Butay, Director
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, Hawai'i 96813-5097

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064 (DIR 0400 STP 8.2418)

Dear Mr. Butay:

Thank you for your letter of May 9, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we understand that the Department's previously issued comment letter dated February 27, 2018 has been adequately addressed, and that the Department indicates that the project does not appear to have any significant impacts to State transportation facilities.

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
K:\DATA\Legacy\Wailuku Afford Rental\Applications\Draft EA\Draft EA responses\State DOT.doc

MAY 21 2018

PHONE (808) 594-1888 FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
560 N. NIMITZ HWY., SUITE 200
HONOLULU, HAWAI'I 96817

HRD 18-8305D

May 10, 2018

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Re: Comments on Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project
Wailuku Ahupua'a, Pū'ali Moku, Maui Mokupuni
Tax Map Keys: (2) 3-5-001: 064

Aloha e Ms. Suyama:

The Office of Hawaiian Affairs (OHA) received your letter and a compact disc containing a copy of the Draft Environmental Assessment (DEA) for the Proposed Wailuku Apartment Rental Housing Project. The applicant, Legacy Wailuku, LLC, is proposing to develop 324 rental units, which will consist of 195 affordable units and 129 market rate units. The applicant is seeking project implementation through Hawai'i Revised Statutes (HRS) § 201H-38, which provides eligible housing developments exemptions from statutes, ordinances, charter provisions, and rules related to planning, zoning construction standards for subdivisions, and development and improvement of land. This EA was prepared to support the applicant's 201H-38 application.

OHA submitted comments in a letter dated October 25, 2017 for a DEA for this project that was published in September 2017, which was subsequently withdrawn in February 2018. OHA's letter is included in this current DEA as an appendix. OHA maintains our same concerns regarding affordable housing and impacts to cultural resources that we expressed in our October 2017 letter and we reiterate them below.

Throughout the DEA, the proposed action is described as consisting of 60 percent affordable rental apartment units that will be priced to qualified individuals earning within the 80% to 140% of Maui area median income (AMI). Page 8, however, states that fifty-five units will be affordable to households in the 51% to 80% AMI category, fifty-five units will be reserved for the 81% to100% AMI category, fifty-five units will be reserved for the 101% to 120% AMI category, and thirty units will fall within the 121% to 140% AMI category. Please clarify if the proposed project will offer units to household earning less than 80% AMI.

Affordable Housing

Maui's affordable housing crisis requires land use planning that prioritizes and maximizes affordable housing opportunities for local residents.[1]

Hawai'i families are in particular need of affordable housing units at or below low-moderate income levels. Notably, recent research shows that 91 percent of the rental housing demand in Maui is for rental units at or below 80% AMI. 80 percent of the rental housing demand is at 60% or below AMI. Only 8 percent of the Maui rental housing demand is for units that are at 80% AMI to 140% AMI, with only 3 percent of the demand at 120% AMI to 140% AMI.[2] For Native Hawaiians, 80 percent of the housing demand for rental units on Maui at 80% AMI or below.[3] As such, OHA is concerned that the proposed project does not adequately address the need for affordable housing. As proposed, income levels of all of the units, while still deemed 'affordable', do not address the need of 91 percent of Maui residents.

The applicant is seeking numerous exemptions under HRS § 201H-38, which, if granted, would provide the applicant with an estimated savings of $4,738,593, or $24,300 per unit. OHA seeks to ensure that the proposed project will truly meet the affordable housing needs of our Native Hawaiian beneficiaries, as well as families in Maui, before the exemptions are granted. According to the DEA, members of the Faith Action Community Equity (FACE) Maui – Affordable Housing Coalition raised concerns during a meeting on June 6, 2017, and suggested that the project should consider rents meeting 50% AMI or below. OHA is recommending that the developer consider funding alternatives (e.g. government grants or subsidies) that would allow the project to meet the needs of the community and offer rental units to families/individuals below 80% AMI.

OHA requests additional information regarding the number of years the project will commit to maintaining the project as affordable; an indication of the number of units allotted for family, elderly, homeless, and tenants with special housing needs; and information regarding the number of studio, 1-bedroom, 2-bedroom, and 3-bedroom units that will be allotted for each AMI level. OHA believes that this information is pertinent to the assessment of the project's socioeconomic impacts and should be included in the DEA.

Impacts to Cultural Resources

OHA is concerned that the archaeological inventory survey (AIS) conducted of the project parcel did not adequately attempt to identify subsurface cultural resources and/or iwi kūpuna (human remains/burials) in the project area. The AIS report states that the subject parcel is "located along the culturally sensitive Wailae Road/Lower Main Corridor which is known to contain numerous traditional burials and extensive habitation sites." The report also states that the eastern portion of the project parcel is known to contain Pu'uone Sand that is likely overlying Iago silty clay soils. OHA notes that it is common knowledge that there is a high likelihood of

[1] The 2016 Hawai'i Housing Planning Study shows very limited demand for market-rate housing. Instead, the majority of demand for Native Hawaiians, the State, as well as Maui County, is almost entirely for units that are affordable. *See* SMS, HAWAI'I HOUSING PLANNING STUDY 34 (2016), *available at* https://dbedt.hawaii.gov/hhfdc/files/2017/03/State_HHPS2016_Report_031317_final.pdf.
[2] *Id.* at 34.
[3] *Id.* at 72.

encountering iwi kūpuna when doing ground disturbing activities in and around sand deposits and dunes. The AIS report identifies several instances where iwi kūpuna were disturbed in the vicinity of the project area.

According to the AIS report eleven test trenches were excavated in the 14.4-acre project area. The report indicates that the project parcel has undergone extensive disturbances from grubbing and grading for sugar cane cultivation, sand mining, and recent construction activities. OHA requests a map identifying the test trenches in relation to the areas of the project parcel that have undergone disturbance and a map identifying the location of the test trenches in relation to the soil types in the project parcel. We also request information regarding the depth of the prior sand mining. Given that a portion of the project area is believed to be underlain by sandy soils and that the project area is located in a close proximity to identified iwi kūpuna, OHA is concerned that the eleven test trenches were insufficient to identify the presence or absence of subsurface cultural resources and/or iwi kūpuna. OHA recommends conducting additional test trenches to identify the extent of the previous land disturbance and to identify the areas of the project parcel that is underlain by sandy soils.

Mahalo for the initiating consultation. Should you have any questions, please contact Teresa Kaneakua, OHA Lead Compliance Specialist, at (808) 594-0231 or teresak@oha.org.

'O wau iho nō me ka 'oia 'i'o,

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer

KC:tk

MUNEKIYO HIRAGA
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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer
State of Hawai'i
Office of Hawaiian Affairs
560 N. Nimitz Highway, Suite 200
Honolulu, Hawai'i 96817

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064 (HRD 18-8305D)

Dear Dr. Crabbe:

Thank you for your letter of May 10, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. We understand that the concerns raised in the Department's previously issued comment letter dated October 25, 2017 are still applicable, and have been reiterated in your current letter of May 10th. In this regard, we have summarized your comments and have provided responses for your consideration.

Comment:

Information presented on page 8 of the Draft Environmental Assessment (EA) provides a breakdown of units to be allocated to the various area median income (AMI) categories. Please clarify if the proposed project will offer units to households earning less than 80% AMI.

Response:

Fifty five (55) units will be set aside for qualifying individuals and families in the low income AMI category. These prospective renters would fall in the 51% to 80% AMI group.

Comment:

Hawai'i families are in particular need of affordable housing units at or below low-moderate income levels. As proposed, the income levels of all of the units, while still

deemed "affordable", do not address the need of 91 percent of Maui residents.

Response:

Legacy Wailuku LLC understands that the housing need for Maui's workforce families is significant. They also recognize that the greater the number of affordable units provided for lower AMI groups, the greater the benefits for the 91 percent demand group cited in your letter. In this context, Legacy Wailuku LLC believes that the solution to the housing problem will involve a combination of project types, all of which will offer a complementary set of products to support Maui's workforce families. These include government subsidized projects which can meet the needs of the lower AMI target groups, as well as privately funded projects such as the Wailuku Apartment Rental Housing Project, which will bring new rental inventory for a broader range of AMI target groups.

It is also noted that rental projects generally can serve a much broader market with incomes ranging from 20 percent to 140 percent AMI. Households that rent can be composed of unrelated individuals (roommates), which is very common. The combined income of all adult occupants is used to determine eligibility (i.e., three individuals that are at 47 percent AMI equals a household with 140 percent AMI income. Creating additional supply of workforce housing (80 percent to 140 percent AMI priced rental units) will provide quality housing stock to lower income and workforce households.

Comment:

OHA is recommending that the developer consider funding alternatives (e.g., government grants or subsidies) that would allow the project to meet the needs of the community and offer rental units to families/individuals below 80% AMI.

Response:

As noted above, Legacy Wailuku LLC views the solution to the Island's housing crisis as one which requires a variety of development approaches, including the development of privately funded rental housing. They also recognize that the use of government subsidies will address the needs of the lower AMI target groups, but that such subsidies may be limited in availability for the Island of Maui. State and federal funds are finite year to year and limited to help subsidize housing, with a growing waitlist. Therefore, Legacy Wailuku LLC has chosen to avoid accessing any direct subsidies from the government in favor of privately funding and financing to deliver much needed housing in a timely manner. By renting affordable units to Section 8 Housing Choice voucher holders, Wailuku Apartments will be able to assist families/individuals below 80 percent AMI.

Comment:

OHA requests additional information regarding the number of years the project will commit to maintaining its affordability; an indication of the number of units allotted for family, elderly, homeless and tenants with special needs; and information regarding the number of studio, 1-bedroom, 2-bedroom and 3-bedroom units that will be allotted to each AMI level. This information is pertinent to the assessment of socio-economic impacts.

Response:

The project will be affordable for 30 years. At that point, Legacy Wailuku LLC may renew its affordability commitment or may sell the units under a pricing protocol yet to be determined. At that time, coordination with the County of Maui will be undertaken to develop a continuity scenario which may be considered reasonable for all parties.

With respect to tenant mix, the project is not intended to address specific tenant types (e.g., elderly, special needs), and is not viewed as a homeless solution project. There will be ADA accessible units capable of accommodating persons with disabilities. In general, the target group for the project are those income qualified individuals who are in need of affordable housing.

With respect to product type (i.e., studio, 1-bedroom, 2-bedroom, 3-bedroom) allocation by AMI category, Legacy Wailuku LLC has not made specific assignments relative to the number of units by product type to be assigned to the respective AMI categories. As a general principle however, studios and 1-bedroom units, having the lower monthly rental amounts will be set aside for the lower AMI qualifying individuals and/or families.

From the standpoint of socio-economic impacts, we believe that the EA appropriately addresses the project's impacts relating to housing needs, particularly in the context of the Wailuku Apartment Rental Housing Project's objective of providing a total of 324, with 60% to fall within the affordable AMI group and 40% within the market category. As previously noted, the project's private funding model, does not allow for the reallocation of units to lower AMI categories, which may be more appropriate for government subsidized projects.

Comment:

OHA is concerned that the archaeological inventory survey conducted for the project did not adequately attempt to identify subsurface cultural resources and/or iwi kupuna in the project area.

Response:

While we note your comment, we also note that the project's archaeological assessment has been reviewed and accepted by the State Historic Preservation Division. (SHPD). Given the potential for encountering subsurface cultural resources as OHA has noted, and as indicated by the SHPD, the Applicant's archaeologist will prepare and implement during construction, an Archaeological Monitoring Plan.

Comment:

OHA requests a map identifying the test trenches in relation to the areas of the project parcel that have undergone disturbance and a map identifying the location of the test trenches in relation to the soil types in the project parcel. We also request information regarding the depth of the prior sand mining. OHA is concerned that the eleven test trenches were insufficient to identify the presence or absence of subsurface cultural resources and/or iwi kupuna. OHA recommends conducting additional test trenches to identify the extent of the previous land disturbance and to identify the areas of the project parcel that is underlain by sandy soil.

Response:

As previously noted, the SHPD has concluded their Chapter 6E-42 Historic Preservation Review for the subject property and has accepted the draft archaeological assessment. Towards addressing concerns relating to the historic and cultural resources, as noted by OHA, the SHPD has requested that the project proceed under archaeological monitoring. Legacy Wailuku LLC will contract the archaeologist to prepare an Archaeological Monitoring Plan consistent with the stipulations set forth by the SHPD. The monitoring plan shall be submitted to the SHPD for review and acceptance, and shall comply with Hawai'i Administrative Rules 13-279-4. As noted in your letter, the archaeologist will prepare the maps requested and will include the maps in the Archaeological Monitoring Plan.

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me at email erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,



Erin Mukai, Manager

EM:lh
cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Lisa Rotunno-Hazuka, Archaeological Services Hawaii
Ben Lee, Clifford Planning & Architecture
Darren Unemori, Warren S. Unemori Engineering, Inc.
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MAY 14 2018

OFFICE OF PLANNING
STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

LEO R. ASUNCION
DIRECTOR
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
Web: http://planning.hawaii.gov/

DTS201805111438RI

May 11, 2018

Ms. Colleen Suyama
Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project, Wailuku, Maui, Hawaii
TMK: (2) 3-5-001: 064

Thank you for the opportunity to provide comments on the Draft Environmental Assessment (Draft EA) for the Wailuku Apartment Rental Housing project, submitted on behalf of Legacy Wailuku, LLC. Our office received and responded to an initial request for comments on this subject via letter dated September 14, 2017. The review material for the latest version of the Draft EA was transmitted to our office also via letter dated April 6, 2018.

It is our understanding that Legacy Wailuku is seeking approval of this rental housing project pursuant to Hawaii Revised Statutes (HRS) § 201H-38, from the State of Hawaii Housing Finance and Development Corporation (HHFDC). The rental housing project will consist of 195 affordable units and 129 market rate units located within nine three-story buildings. The project will also include a community center/leasing office building, swimming pool, barbeque area, and children play areas. Upon approval, Wailuku Legacy will seek a State District Boundary Amendment to reclassify the property from the "Agricultural" district to the "Urban" district.

The Office of Planning (OP) has reviewed the transmitted material and has the following comments to offer:

1. Our response letter dated October 10, 2017 (DTS201710091704) to the initial Draft EA noted that the following subject matter was satisfactorily addressed:
   - Impacts to Surface Water Resources
   - Drainage and Stormwater Runoff Controls

2. Additionally, in our October 10, 2017 response letter, we noted that the initial Draft EA was incomplete, and it would need to further evaluate the following items:

- the project's consistency with all parts of the Hawaii State Planning Act, Hawaii Revised Statutes (HRS) Chapter 226. The analysis on Part I – overall themes, goals, objectives and policies, as well as Part III – priority guidelines was incomplete.

- the project's ability to meet the objectives and policies of the Hawaii Coastal Zone Management (CZM) program, as listed in HRS § 205A-2.

- the project's ability to support the goals of Act 127, Session Laws of Hawaii 2016, affordable rental housing.

- the Draft Cultural Impact Assessment was incomplete and provided an inadequate determination of traditional and customary practices of native Hawaiians and the project's impact on these rights. We had asked that the Final Cultural Impact Assessment (1) identify and scope valued cultural, historical, or natural resources in the petition area; (2) evaluate the extent to which traditional and customary native Hawaiian rights will be affected or impaired, and (3) feasible action, if any, to be taken by the Maui County Council to protect native Hawaiian rights.

OP acknowledges that the comments and concerns cited above to the initial version of the Draft EA have been addressed in this latest version.

We have no further comments at this time. If you have any questions regarding this comment letter, please contact Joshua Hekekia of our office at (808) 587-2845.

Sincerely,

Leo R. Asuncion
Director

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Leo R. Asuncion, Director
State of Hawai'i
Office of Planning
P.O. Box 2359
Honolulu, Hawai'i 96804

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Asuncion:

Thank you for your letter of May 11, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we acknowledge the Office of Planning's (OP) comments provided, as summarized below:

1. The OP's comments relating to impacts to surface water resources, and drainage and stormwater runoff controls, as set forth in OP's letter of October 10, 2017, have been satisfactorily addressed.

2. The OP's comments, as set forth in the October 10, 2017 letter, relating to the project's consistency with the Hawaii State Planning Act; Hawaii Coastal Zone Management Program; Act 127, Session Laws of Hawaii 2016 (relating to affordable rental housing); and the Cultural Impact Assessment have been appropriately addressed in the latest version of the Draft Environmental Assessment (EA).

3. The OP has no further comments at this time.

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
HOUSING DIVISION
COUNTY OF MAUI

APR 23 2018

ALAN M. ARAKAWA
Mayor
CAROL K. REIMANN
Director
JAN SHISHIDO
Deputy Director

35 LUNALILO STREET, SUITE 102 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7351 • FAX (808) 270-6284

April 19, 2018

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at TMK (2) 3-5-001:064, Wailuku, Maui, Hawaii.

The Department has reviewed the Draft Environmental Request for the above subject project. Based on our review, we have determined that the project is subject to Chapter 2.96, Maui County Code, and must comply with all applicable regulations.

Please feel free to contact me at (808) 270-7355 if you have any questions.

Sincerely,

C. BUDDY ALMEIDA
Housing Administrator

cc: Director of Housing and Human Concerns

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

C. Buddy Almeida, Housing Administrator
County of Maui
Department of Housing and Human Concerns
35 Lunalilo Street, Suite 102
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Almeida:

Thank you for your letter of April 19, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we have summarized your comments and provide the following responses.

Comment No. 1:

The project is subject to Chapter 2.96, Maui County Code, and must comply with all applicable requirements.

Response: The Applicant will be processing the proposed Wailuku Apartment Rental Housing Project pursuant to Section 201H, HRS. The application is being processed by the Hawaii Housing Finance and Development Corporation (HHFDC). In this regard, HHFDC's rental income guidelines will be used for the project, as summarized in **Table 1**, below.

Table 1. HHFDC Maui Affordable Rental Guidelines, Distribution of Units by Income Category and Rental Ranges

Area Median Income Level	Income Group	Number of Units	Rental Range*	Percentage of Units
51–80%	Low income	55	$627 - $1,616*	17%
81-100%	Low-moderate income	55	$1,123 - $2,107*	17%
101-120%	Low-moderate income	55	$1,453 - $2,598*	17%
121-140%	Moderate income	30	$1,783 - $3,089*	9%
Subtotal of Affordable Units		**195**		60%
N/A	Market	129	---	40%
Grand Total		**324**		**100%**

* Note: Rents are based on 2018 HHFDC Rent Guidelines minus utility allowance. These are subject to change based on annually published rent guidelines and utility allowances by State and County agencies.

In summary, 195 of the 324 units or 60 percent of the units will be rented to those falling within the HHFDC's qualified income categories.

Thank you again for providing comments on the Draft Environmental Assessment (EA). A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at 244-2015.

Very truly yours,



Erin Mukai, Manager

EM:yp
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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ALAN M. ARAKAWA
Mayor

KA'ALA BUENCONSEJO
Director

BRIANNE L. SAVAGE
Deputy Director

(808) 270-7230
FAX (808) 270-7934

MAY 10 2018

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

May 4, 2018

Ms. Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Suyama:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT AT TMK: (2) 3-5-001:064, WAILUKU, MAUI, HAWAII

Thank you for the opportunity to review and comment on the subject project. The Department of Parks and Recreation (DPR) does not have any comments or objections to the project. Once the applicant provides DPR with a copy of the fully executed 201H HRS affordable housing agreement with the Department of Housing and Human Concerns, DPR will provide exemption from Maui County Code Section 18.16.320 Parks and Playgrounds.

Should you have any questions or concerns, please feel free to call me, or Robert Halvorson, Chief of Planning and Development, at 270-7931.

Sincerely,

KA'ALA BUENCONSEJO
Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning and Development

KB:RH:do

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 29, 2018

Ka'ala Buenconsejo, Director
County of Maui
Department of Parks and Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Buenconsejo:

Thank you for your letter of May 4, 2018 regarding the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. The project Applicant, Legacy Wailuku LLC, understands that the Department has no comments or objection to the proposed project. As you have noted, upon execution of the affordable housing agreement, coordination will be undertaken with the Department to exempt the project from Maui County Code Section 18.16.320 relating to Parks and Playgrounds.

Thank you again for providing your response on the Draft Environmental Assessment (EA). A copy of your letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI

DEPARTMENT OF PLANNING

May 8, 2018

Mr. Ken T. Takahashi
Hawaii Housing Finance Development Corporation
677 Queen Street
Honolulu, Hawaii 96813

Dear Mr. Takahashi:

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR WAILUKU AFFORDABLE HOUSING PROJECT, WAILUKU, ISLAND OF MAUI, HAWAII; TMK: (2) 3-5-001:064 (EAC 2018/0003)

The Department of Planning (Department) is in receipt of the above-referenced Draft EA for the proposed Wailuku Affordable Housing Project. The Department understands that the concept has not changed much since originally proposed by the Bagoyo Development Consulting Group in the Draft published in the September 23, 2017, Office of Environmental Quality Control (OEQC) Notice. We note that there are currently more parking stalls proposed, 661 instead of 486 as previously proposed. For the Final EA, the Department provides the following comments:

1. On the Conceptual Building Elevations, the buildings are painted red and yellow. Please consider painting them in more neutral tones, so as to blend in with the surrounding landscape.

2. In the agricultural portion of the description of existing conditions, there is no mention of how the proposed project will justify its removal from agricultural use, as it is designated as "Prime" land with "A" productivity, which is the highest productivity capacity for agricultural land. We encourage you to include such a discussion in the Final EA.

3. The Traffic Impact Assessment Report does not factor in the possible development of one (1) of the Applicant's other business ventures, the Waikapu Affordable Workforce Housing Project, which is being proposed at Tax Map Key (TMK) (2) 3-5-002:012 (POR.) and will consist of sixty eight (68) single-family units and twelve (12) duplex units. Please relay this information to your traffic consultant for revision of the Traffic Impact Assessment Report for the Final EA.

   In addition, please have your engineer consider that traffic frequently backs up along Kuikahi Drive during morning and afternoon rush hours; please consider limiting access to the site to Waiale Road only, or limiting

ONE MAIN PLAZA BUILDING / 2200 MAIN STREET, SUITE 315 / 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

access off of Kuikahi Drive to right-turn exit only. Please include such discussion in your revised Traffic Impact Assessment Report for the Final EA.

4. We noticed that in your agency comments, there was no response from the Department of Parks and Recreation (Parks) on development of your four (4) play areas. We strongly encourage coordination Parks and obtainment of written agency comments to be included in the Final EA.

5. On page 200, there is mention that informational meetings were held with various community associations; however, no minutes were included. We note that there was a letter from the Board of one (1) of the subdivisions, but none of the others commented. Please include minutes from those meetings and/or note how many people attended.

6. We noted the concern on visual impacts from Honoapiilani Highway previously. In the view analysis in the Draft EA, from view 1, Honoapiilani Highway sits at an elevation of 362 feet (ft.). The building 9 roof ridge is at the 387 ft. elevation. From view 2, the highway sits at an elevation of 362 ft. and the building 8 roof ridge is at the 383 ft. elevation. As currently proposed, one (1) of the buildings still blocks the view 1 perspective from the highway by about 25 ft. and view 2 by 21 ft. As a result of the elevation differences, there will still be a blockage of views of the harbor and of Haleakala from the highway in either direction. We recognize there is a need for affordable housing and also the need for the developer to earn a profit; however, we strongly urge the Applicant to consider eliminating one (1) story off of the proposed concept and/or situating the buildings, similar to the Kehalani Foodland, which will mitigate adverse view impacts off of the highway.

7. Please incorporate some pedestrian pathways so that residents can more easily and safely traverse the project area and go to the swimming pool/community center and pedestrian crossing to go to Foodland, McDonald's, etc.

8. Please ensure that there is adequate lighting for resident's safety, as per comments from the Maui Police Department. Also ensure that the lighting is downshielded, as per the flora/fauna consultant's recommendation.

9. Per our Zoning Administration and Enforcement Division, on page 192, number 14, please delete the verbage from, "MCC 19.30A.050," through the end of the development standards, and replace with the following, "all of MCC 19.30A, and instead have MCC 19.12, A-2 Apartment District zoning apply to this project."

Thank you for the opportunity to comment. Please include the Department on the distribution list for the new Final EA. Should you require further clarification, please contact Staff Planner Tara Furukawa by email at tara.furukawa@mauicounty.gov or by phone at (808) 270-7520.

Sincerely,

WILLIAM SPENCE
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
John S. Rapacz, Planning Program Administrator (PDF)
Pam Eaton, Planning Program Administrator (PDF)
Tara K. Furukawa, Staff Planner (PDF)
Danny Dias, Planning Supervisor (PDF)
Linda Schatz, Legacy Wailuku LLC (PDF)
Michael Munekiyo, AICP President, Munekiyo Hiraga (PDF)
Colleen Suyama, Senior Associate, Munekiyo Hiraga (PDF)
Kehalani Agricultural Investors LLC (PDF)
Project File

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Michael T. Munekiyo
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Karlynn K. Fukuda
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Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Mr. William Spence, Director
County of Maui
Department of Planning
One Main Plaza Building
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Spence:

Thank you for your letter of May 8, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we are providing information and clarification to address each of your comments, as follows:

Comment No. 1:

On the Conceptual Building Elevations, the buildings are painted red and yellow. Please consider painting them in more neutral tones, so as to blend in with the surrounding landscape.

Response:

The Applicant will review building paint colors and consider using more neutral tones to blend with the surrounding landscape.

Comment No. 2:

In the agricultural portion of the description of existing conditions, there is no mention of how the proposed project will justify its removal from agricultural use, as it Is designated as "Prime" land with "A" productivity, which is the highest productivity capacity for agricultural land. We encourage you to include such a discussion in the Final EA.

Response:

Section II.A.4 of the Environmental Assessment, relating to "Agricultural Productivity Considerations will be revised to include additional discussion relating to the justification for the removal of lands from agricultural use.

Comment No. 3:

The Traffic Impact Assessment Report does not factor in the possible development of one (1) of the Applicant's other business ventures, the Waikapu Affordable Workforce Housing Project, which is being proposed at Tax Map Key (TMK) (2) 3-5-002:012 (POR.) and will consist of sixty eight (68) single-family units and twelve (12) duplex units. Please relay this information to your traffic consultant for revision of the Traffic Impact Assessment Report for the Final EA.

In addition, please have your engineer consider that traffic frequently backs up along Kuikahi Drive during morning and afternoon rush hours; please consider limiting access to the site to Waiale Road only, or limiting access off of Kuikahi Drive to right-turn exit only. Please include such discussion in your revised Traffic Impact Assessment Report for the Final EA.

Response:

The Department's comments regarding traffic have been provided to the project's traffic engineer. The engineer will update the TIAR to recognize the 68-unit Waikapū Affordable Workforce Housing Project.

The traffic engineer will also review the traffic analysis relating to access to the project site from Waiʻale Road only, or limiting access to/from Kuʻikahi Drive to right-turn in and right-turn out only.

Comment No. 4:

We noticed that in your agency comments, there was no response from the Department of Parks and Recreation (Parks) on development of your four (4) play areas. We strongly encourage coordination Parks and obtainment of written agency comments to be included in the Final EA.

Response:

A comment letter has been received from the Department of Parks and Recreation.

Their comment letter is attached hereto for you reference **(Exhibit "A")** and will be included in the Final EA.

Comment No. 5:

On page 200, there is mention that informational meetings were held with various community associations; however, no minutes were included. We note that there was a letter from the Board of one (1) of the subdivisions, but none of the others commented. Please include minutes from those meetings and/or note how many people attended.

Response:

Information relating to community meetings has been provided by the Applicant and is attached hereto as **Exhibit "B"**.

Comment No. 6:

We noted the concern on visual impacts from Honoapiilani Highway previously. In the view analysis in the Draft EA, from view 1, Honoapiilani Highway sits at an elevation of 362 feet (ft.). The building 9 roof ridge is at the 387 ft. elevation. From view 2, the highway sits at an elevation of 362 ft. and the building 8 roof ridge is at the 383 ft. elevation. As currently proposed, one (1) of the buildings still blocks the view 1 perspective from the highway by about 25 ft. and view 2 by 21 ft. As a result of the elevation differences, there will still be a blockage of views of the harbor and of Haleakala from the highway in either direction. We recognize there is a need for affordable housing and also the need for the developer to earn a profit; however, we strongly urge the Applicant to consider eliminating one (1) story off of the proposed concept and/or situating the buildings, similar to the Kehalani Foodland, which will mitigate adverse view impacts off of the highway.

Response:

The view analysis was prepared to reflect the provision of corridors through which views of the ocean (towards Kahului) and Haleakalā would be preserved. According to the project architect, the rendering perspectives, views 1 and 2, were taken at the corners of the property along Honoapi'ilani Highway and illustrate that views of the ocean and the upper portion of Haleakalā would not be blocked from these two (2) vantage points. The views, however, would be blocked if a person or a passenger(s) in a vehicle is positioned directly in front of the buildings. The buildings are sited at an angle from the highway with setbacks approximately 63 feet to 108 feet on Building 8 and 136 feet to 181 feet on Building 9. The setbacks are substantially greater than the minimum 15-foot front yard setback in Residential Districts and 25-foot minimum setback in

Agricultural Districts. The two (2) buildings are spaced approximately 78 feet apart.

The length of the property along the highway is about 900 feet. The total length of the two (2) buildings, each measuring 183 feet in length, is about 366 feet and occupies 40 percent of the highway frontage. The intermittent views of these two (2) buildings seen from a vehicle traveling at 35 mph in either direction would be about 7 seconds. The large setbacks and the conceptual landscape plan with hedge and trees proposed along the highway would reduce the visual impact of Buildings 8 and 9 seen from Honoapi'ilani Highway. Lowering the height of the building by one (1) story would reduce the project by 24 units (12 units in each building). The reduction in the number of units would make the project infeasible.

Comment No. 7:

Please incorporate some pedestrian pathways so that residents can more easily and safely traverse the project area and go to the swimming pool/community center and pedestrian crossing to go to Foodland, McDonald's, etc.

Response:

As design of the project progresses, internal pedestrian pathways will be added to ensure that access to internal destination points can be accessed in a safe manner.

Comment No. 8:

Please ensure that there is adequate lighting for resident's safety, as per comments from the Maui Police Department. Also ensure that the lighting is down-shielded, as per the flora/fauna consultant's recommendation.

Response:

Onsite lighting will be designed to address resident safety needs. Fixture types (i.e., down-shielded) will be selected to ensure that adverse effects to wildlife are mitigated.

Comment No. 9:

Per our Zoning Administration and Enforcement Division, on page 192, number 14, please delete the verbage from, "MCC 19.30A.050," through the end of the development standards, and replace with the following, "all of MCC 19.30A, and instead have MCC 19.12, A-2 Apartment District zoning apply to this project."

Response:

Exemption No. 14 on page 192 will be revised to reflect the applicability of the A-2, Apartment District zoning standards.

Thank you again for providing comments on the Draft Environmental Assessment (EA). A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,



Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Darren Unemori, Warren S. Unemori Engineering, Inc.
Ben Lee, Clifford Planning & Architecture LLC
K:\DATA\Legacy\Wailuku Afford Rental\Applications\Draft EA\Draft EA responses\Planning.doc

EXHIBIT A.

May 4, 2018 Comment Letter from Department of Parks and Recreation

ALAN M. ARAKAWA
Mayor

KA'ALA BUENCONSEJO
Director

BRIANNE L. SAVAGE
Deputy Director

(808) 270-7230
FAX (808) 270-7934

MAY 10 2018

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

May 4, 2018

Ms. Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Suyama:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED WAILUKU APARTMENT RENTAL HOUSING PROJECT AT TMK: (2) 3-5-001:064, WAILUKU, MAUI, HAWAII

Thank you for the opportunity to review and comment on the subject project. The Department of Parks and Recreation (DPR) does not have any comments or objections to the project. Once the applicant provides DPR with a copy of the fully executed 201H HRS affordable housing agreement with the Department of Housing and Human Concerns, DPR will provide exemption from Maui County Code Section 18.16.320 Parks and Playgrounds.

Should you have any questions or concerns, please feel free to call me, or Robert Halvorson, Chief of Planning and Development, at 270-7931.

Sincerely,

KA'ALA BUENCONSEJO
Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning and Development

KB:RH:do

EXHIBIT B.

Meeting Notes for Community Meetings

Wailuku Workforce Rentals
Meetings with County Agencies, Council Members, and Community Stakeholders
TMK: (2) 3-5-001:064

	Date	Meeting
1.	February 24, 2017	Mayor Alan Arakawa • Discuss overview of project. Mayor was generally supportive since he wanted to purchase property at one point to do a County affordable housing project.
2.	February 24, 2017	Council Chair Mike White • Discuss overview of project and exemptions we would be seeking. He was generally supportive and asked that when we have more specific details that we come back and brief him so he can guide and be supportive.
3.	April 3, 2017	Department of Public Works • Austin Tsutsumi had a kick off meeting with DPW on this project to scope our Traffic Impact Analysis Report (TIAR) • Due to Council concerns, DPW wanted us to increase the scope of the study to include the Waiale/Waiinu intersection and Maui Lani Parkway/Kamehameha Avenue intersections as part of the TIAR. We'll need to update our proposal scope/fee to account for these additional intersections. • Due to close proximity of the proposed Access on Kuikahi Drive (Across the Foodland access), they do have concerns with traffic flow along that stretch if a signal was constructed. We can determine whether it's warranted first based on our study. • They currently don't have any planned roadway improvements in the area, so the AM congestion on Waiale Road that we brought up earlier, will need to be addressed somehow in our TIAR.
4.	April 4, 2017	Office of Housing and Human Concerns • Met with Carol Reimann, Director and Buddy Almeida (Program Administrator) regarding an overview of the project. They asked us to keep them in the loop.
5.	April 4, 2017	Council Member Bob Carroll • Discuss overview of project • No objection to the 60% affordable, 40% market mix • Exemptions list highlights were reviewed • Thought location of project was ideal infill
6.	April 4, 2017	Maui Electric Company • Met with Keith Sakamoto, Distribution Engineering Supervisor • Discuss MECo easement along Honoapiilani Highway and utility pole exemption • No objection to putting parking in easement and avoiding undergrounding utility pole
7.	April 4, 2017	FACE Maui • Presented project to FACE Maui membership, Maui Tomorrow, Sierra Club, Homeowner's Associations (approximately 20 people) • They wanted deeper affordability at 50%AMI, which we shared was not achievable without state and/or federal subsidies

	Date	Meeting
		• They also asked us to look at a rent to own program and we shared with them that we did not think we could pencil our project with a rent to own program. That this would also require a subsidy from the government. • Dick Mayer shared his concern regarding traffic in the area and the need for Maui County to address regional issues, we expressed that we would take care of the traffic increases we are generating which were and increase 2.8% at Waiale Rd. and Kuikahi Drive intersection and 1.5% increase at Honoapiilani Highway and Kuikahi Drive intersection. He still felt that the regional issues were our responsibility, but we reiterated that whatever traffic we create we will mitigate our portion since affordable housing cannot be burdened with the responsibility for fixing all traffic issues in the regional area that were there prior to this project's buildout.
8.	April 10, 2017	Maui Department of Transportation • Meet with Director and Deputy Director regarding potential bus stop near property. They shared that they would not want to put a bus stop on our property because they currently have a route that working to service the area and nearby. • Go over any exemptions with them such as the improvements at the two intersections. They had no comments at the time. • Review ingress and egress on site plan
9.	April 11, 2017	Council Member Stacy Crivello • Review project site plan and exemptions • No objections to the project at this time and would like us to meet with her again to update her on the project.
10.	April 11, 2017	Office of Housing and Human Concerns • Review updates on the project with Director Carol Reimann, Buddy Almeida, and Jeff Ueoka • Review development program, affordability levels, draft exemptions to ensure it would meet County MCC 2.96 requirements.
11.	April 18, 2017	Maui County Real Property Tax Supervisor – Finance Department • Review real property tax exemption idea.
12.	April 18, 2017	Maui County Department of Water Supply • Discuss exemptions with Wendy Taomoto, Chief Engineer • We walked through the exemptions for offsite water system infrastructure improvements, water availability, water assessment fees, and onsite water pipes. All exemptions at the time of the meeting were deemed to be fine with no objections.
13.	April 25, 2017	Department of Public Works • ATA met with Nolly and Kurt from DPW regarding the draft TIAR. Main issues that were discussed are:

	Date	Meeting
		○ They are okay with the two left-turn lanes we are proposing at the accesses. ○ Council, more specifically Elle Cochran who chairs the Infrastructure and Environmental Management committee, has recently been asking about the issues at Waiale Road/Waiinu Road and Waiale Road/Kuikahi Drive. ▪ DPW wants us to at least identify the congestion issues in the TIAR and recommend potential solutions to help mitigate it. This wouldn't necessarily tie the development to regional improvements, but they want it at least mentioned in the TIAR. ○ DPW has expressed some concerns with exemptions for 201H projects in the past. • As a result the TIAR was updated to reflect DPW concerns and requests
14.	April 27, 2017	Ka Hale A Ke Ola and Hale Makana • Meet with Monique Yamashita, Executive Director of the affordable rental housing project. She talked about the need for more rentals in the community since they have a long waiting list.
15.	April 27, 2017	Council Member Don Guzman • Discuss project overview and exemptions list. There were no initial objections other than some reservations on the real estate property tax exemption. He thought it would be hard to convince the budget and finance chair of this idea.
16.	May 5, 2017	Department of Public Works • Meeting to discuss off site road improvements, traffic and complete streets • The principal takeaways of the meeting were: ○ DPW does not endorse proposed exemptions to infrastructure improvements but leaves it up to the County Council to decide whether to grant them or not; ○ Traffic was expected to be the most significant issue under DPW's jurisdiction; ○ DPW suggested that Wailuku Apartments consider participating in the planned County pedestrian improvement project along Waiale Road rather than installing the proposed asphalt sidewalk since it would likely have to be redone; and ○ DPW would prefer to see some storm water quality measures employed onsite that could be accommodated within Wailuku Apartments' budget.
17.	May 8, 2017	Department of Public Works

Wailuku Workforce Rentals
Meetings with County Agencies, Council Members, and Community Stakeholders
TMK: (2) 3-5-001:064

	Date	Meeting
		• Submitted exemptions list to DPW for internal review along with Preliminary Engineer Report and Traffic Impact Analysis Report via email to Deputy Director Rowena Dadag-Andaya
18.	May 8, 2017	Office of Housing and Human Concerns • Follow up on questions and concerns regarding development program and ensured they were still supportive of our exemptions list.
19.	May 8, 2017	Council Member Alika Atay • Review project and exemptions. No objections other than he wasn't sure he could support a full park assessment fee waiver. He'd be ok with the affordable units being waived but not market rate. He had not objections to the other exemptions.
20.	May 8, 2017	FACE Maui • Presentation on housing affordability and achieving feasibility for workforce rental housing with draft exemptions • 120 nurses need housing units and can't find anything in the Wailuku area; hospital has 400 job openings and can't recruit people because of the high cost of living and not enough workers in the health field
21.	May 8, 2017	Waikapu Community Association Meeting • Review project with members. Traffic and views were their main concern. We provide a view analysis to show that minimal impact. They shared that they wanted trees to soften the view and wanted a solution that met the needs of pedestrians in the area. They also wanted us to find a solution to the regional traffic issues, but we told them that we could only mitigate what we produce and regional issues in the area predates us and has been a long-time issue that the County needs to tackle. • They were also concerned if these were long-term rentals – we reassured them that is our program and we will not rent short-term. Minimum is 6-month as a rental. They were also concerned that we'd attract "non-locals" to rent. We told them we could not discriminate due to Fair Housing laws but that we our intention is to rent to the local community and not vacationers.
22.	May 16, 2017	Maui County Planning Department • Met with Clayton Yoshida, Planning • Review project and exemptions list • Discussed the need for a district boundary amendment and our requested exemption from the process. Planning had no objection.
23.	May 16, 2017	Council Member Kelly King • Review project and exemptions list. No major objections other to ensure we have done our outreach and informed all stakeholders. We assured her that we have been meeting with community groups and plan to continue to do so with others.

Wailuku Workforce Rentals
Meetings with County Agencies, Council Members, and Community Stakeholders
TMK: (2) 3-5-001:064

	Date	Meeting
24.	May 16, 2017	Kehalani Homeowner's Association Board Meeting • Review project and exemptions. Traffic was an issue and off-site parking. There was an acknowledgement that the community needed affordable rentals. • We spend a long time discussing parking and how bad the on-street parking is in the neighborhood. They did not want us to exacerbate this issue. We told them we were proposing 1.5 stalls per unit and they told us that they didn't think this was enough.
25.	May 19, 2017	Office of Housing and Human Concerns • Follow up on questions and concerns regarding development program • Discuss rent pricing guidelines • Discuss need for the district boundary amendment and best approach on hearings for both the DBA and the 201H
26.	May 19, 2017	Council Member Elle Cochran • Review project and exemptions list. Elle wanted a longer affordability period than 30 years. She said she could not vote for the project unless it was in perpetuity. We said we could not do that to finance a project that didn't have any direct government subsidies. She asked us to continue to update her on the project.
27.	June 6, 2017	Council Member Yuki Lei Sugimura • Discuss overview of project and exemptions list. No major objections and was very supportive. She also wanted to make sure we were meeting with Community members.
28.	June 6, 2017	FACE Maui • Discuss overview of project and exemptions list. Wants deeper affordability below 60%AMI. We told them that this would require major subsidies and that there is not enough money by the State or County and currently there is a waiting list for low-income housing tax credits that is very long – a 7 year waiting list. • Members were also concerned about the regional traffic issues. We told them that we can only take care of our project specific traffic increase and we are not able to solve all the regional traffic issues in the community which are borne by larger master plans in the area. • Members were also concerned about over crowding in the schools. We told them we are doing our share by contributing to the DOE impact fee to ensure that we help pay for our share of the school facilities. • They asked us about the density and one member felt that the density was too much for the area. We told them that we studied the density carefully to ensure that we minimized impact but also was able to get economies of scale to create an affordable rental project that was feasible. We also told them that density is the

	Date	Meeting
		only way Maui County will be able to preserve green space, efficiently use infrastructure and create location efficiency so that families and children can walk to commercial uses, schools, and parks rather than get in their cars and increase traffic.
29.	June 6, 2017	Waikapu Community Association • Brief presentation on project. Views were an issue and we tried to address it with our view analysis. • Traffic was also a major concern and we shared our improvements. They requested that we look carefully at the safety along Kuikahi. At this time our design did not factor in a pedestrian sidewalk or a bikelane on Kuikahi, only on Waiale. • They were also concerned about off-site parking; our program provides 1.5 stalls per unit. • Members were also scared that our affordable rental project was going to attract crime given their perception of the profile of the people who would live in our community. We had to reassure members that the people we would serve were those who lived in our community as teachers, nurses, police men, postal workers, etc.
30.	June 14, 2017	Parks and Recreation Department • Met with Ka'ala Buenconsequo, Director • Brief overview of the project and discussed proposed park impact fee exemption. No major objections and is deferring to the county council.
31.	June 22, 2017	Mayor Alan Arakawa • Meeting to discuss project and exemptions • Secure his support to process project via HHFDC
32.	June 26, 2017	Office of Housing and Human Concerns • Follow up with Director Carol Reimann and Mayor Arakawa on moving the project over to HHFDC. Carol was supportive and was willing to write a letter for us.
33.	August 7, 2017	Council Member Alika Atay • Review newly revised exemptions. Alika better understood exemptions and still has objections to the park assessment being fully waived and asked us to meet with Park's and Rec's director – which we told him we did.
34.	August 7, 2017	Council Member Kelly King • Review newly revised exemptions. She had no major comments.
35.	August 7, 2017	Reid Kawabata (Waikapu Community Association President) • Review newly revised exemptions and discuss their concerns regarding traffic and pedestrian safety. Reid was receptive that we were trying to meet the requirements but was pushing for a signal at the middle of the block on Kuikahi which DPW does not want because there are lights at the intersections already.

Wailuku Workforce Rentals
Meetings with County Agencies, Council Members, and Community Stakeholders
TMK: (2) 3-5-001:064

	Date	Meeting
		• Reid wants full sidewalks but when we shared the at grade sidewalk with bike and several feet of buffer he seemed to be ok with the design solution.
36.	August 7, 2017	Council Member Don Guzman • Review newly revised exemptions. No objections at the meeting.
37.	September 7, 2017	Dick Mayer • Review project and the exemptions list. Traffic again was an issue and wanted us to scope a larger regional area. We said that our project could not take the burden of the communities' traffic woes, but will handle our own increase in traffic that we create.
38.	September 7, 2017	MECo • Review project for PV
39.	October 5, 2017	Council Member Alika Atay • Review another round of revisions to go over in detail on the specifics.
40.	October 5, 2017	Lucienne DeNaie, Sierra Club Maui President • Reviewed exemptions and traffic. Lucienne was concerned about the clean water act and we assured her that we would not be permitted if we did not meet federal/state/county requirements.
41.	October 5, 2017	Bruce U'u and Bill Kamai (Carpenter's Union) • Review project and exemptions to get their support • Carpenters Union supports the project
42.	October 5, 2017	Council Member Mike White • Review project exemptions and there were no objections. He thought that the real property tax exemption idea was a unique one but did not say if he would be for or against.
43.	October 5, 2017	Wailuku Heights Homeowner's Association • Met with president of HOA and he understood the project and generally felt that it doesn't affect his members because it was too far away, but that he'd share it with his members if they had any comments to provide us. No comments thus far.
44.	October 6, 2017	Hawaii Government Employees Association • Review project with Michele Mitra, Maui Division Chief • We asked for their support because much of our targeted renters will be workforce – government employees. They said they have to bring it to the Maui board for review but they know as an organization housing has become an issue for their younger members who struggle to live in Hawaii.
45.	October 6, 2017	Meeting with Mayor • Another meeting with Mayor to go over DBA process along with Carol Reimann. We determined strategy to move forward.
46.	October 11, 2017	Kehalani Homeowner's Association • Scott Matsuura, President of the association. He brought their office manager who handles community issues to the meeting.

	Date	Meeting
		They said that traffic is a concern but for them off-site parking is an even greater concern and told us to be cautious in managing renters and their parking needs.
47.	October 24, 2017	Department of Public Works • Met wtih Kurt and Nolly from DPW, they mentioned a crosswalk at Kuikahi Drive will likely be brought up by agencies or County Council. They were considering ways to tie in the RRFB at the intersection with the raised median and right-in, right-out (RIRO) restriction. They are still against a full movement traffic signal, but seemed willing to discuss RRFB if feasible. We may need to conduct a speed study, if we go that route, to determine the 85th percentile speed to meet their site requirements.
48.	October 26, 2017	Council Member Mike White • We met to go over the status of the project and gauge his support. He still thinks things are fine and did not share any key issues regarding the exemptions. We went through them one by one to explain what we would be asking for.
49.	November 1, 2017	Department of Fire and Public Safety • Met with Paul Haake, Captain to discuss our exemptions on fire. No objections and felt that we would be coming in for review prior to permit approval so they could review details of design at that point regarding fire truck turn arounds, sprinklered buildings, and fire hydrants.
50.	November 3, 2017	Department of Public Works • Met with Kurt and Nolly from Public Works. They said that since a crosswalk will likely go in, they are ok with the proposed RRFB system. • Kurt's only comment was that we need to also add an RRFB system in the median per COM RRFB guidelines.
51.	November 5, 2017	Council Member Bob Carroll (Chair of Land Use Committee) • Met to discuss progress on the 201H application and EA • Discussed timing of potential opportunities for future hearings on the project
52.	November 5, 2017	Council Member Stacy Crivelho (Chair of the Housing Committee) • Met to discuss housing policy and share our 201H project progress • Discussed subsidies needed for low-income and workforce housing projects
53.	November 5, 2017	Waikapu Community Association Membership Meeting • Presented update on 201H/EA process to community • Followed up on topics from the last meeting regarding traffic, off-site street improvements, landscape plan, etc. • Members brought up overcrowding at schools and we mentioned we'd be paying the DOE impact fee. How the DOE handles that

	Date	*Meeting*
		money is up to them on dealing with the overcrowding and developing new schools.
54.	March 12, 2018	Waikapu Community Association Meeting at Valley Isle Fellowship • Traffic specific to Waiale and Kuikahi intersection as brought up and we provided our mitigation solution to solving the project's projected increase in traffic for the base year 2021 • We shared that we'd provide at grade sidewalks and bike lanes on Waiale and Kuikahi. We also shared that we would like to construct a pedestrian yellow beacon for the mid-block crossing on Kuikahi. Neither garnered any opposition or negative comments. • We reassured the community that we are parking to code at 2 stalls per 1 unit vs. the initial offering of 1.5 stalls per unit and the group seemed satisfied with no comments.
55.	April 17, 2018	Kehalani Community Association Annual Meeting • We presented the project and provided an update to this group noting the changes in the EA. • We reviewed traffic improvements, view planes, told them we would be paying the DOE impact fee and sharing the affordable program noted in the EA. • We were asked to field questions after the presentation. One young woman in hear early 20's came up to us and asked us if this was going to be a lottery and when we expect to take occupancy. She seemed like she was an interested renter looking for housing.

APR 20 2018

POLICE DEPARTMENT

COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

TIVOLI S. FAAUMU
CHIEF OF POLICE

DEAN M. RICKARD
DEPUTY CHIEF OF POLICE

April 16, 2018

Ms. Colleen Suyama
Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at TMK (2) 3-5-001:064, Wailuku, Maui, Hawaii

Dear Ms. Suyama:

This is in response to your letter dated April 6, 2018 requesting comments to the Draft Environmental Assessment (EA) for the proposed Wailuku Apartment Rental Housing project.

In review of the submitted documents, concerns from the police perspective are upon the safety of pedestrians and vehicular movement. Consideration is requested for the installation of sufficient lighting for the safety of motorist and also to assist as a crime prevention/deterrence. All vehicular traffic in the immediate and surrounding areas must be carefully considered and planned for to lessen the impact of congestion during peak morning and evening times.

Thank you for giving us the opportunity to comment on this project.

Sincerely,

Assistant Chief John Jakubczak
for: TIVOLI S. FAAUMU
Chief of Police

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Tivoli Faaumu, Chief of Police
Police Department
County of Maui
55 Mahalani Street
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Chief Faaumu:

Thank you for your letter of April 16, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we have summarized your comments and provide the following responses.

Comment No. 1:

The Department's concern center on pedestrian safety and safety related to vehicular movements. Consider sufficient lighting for safety of motorists and for crime prevention/deterrence.

Response: Onsite lighting will be provided in a manner which supports safety for both pedestrians and motorists. In addition, lighting and landscaping will consider environmental design factors which prevent and deter crime.

Comment No. 2:

Vehicular traffic in the immediate and surrounding areas must be considered and planned to lesson impacts of congestion during peak hours.

Response: The project's traffic engineer has examined traffic impacts associated with the proposed action. Appropriate measures will be implemented to ensure that traffic impacts attributed to the project are minimized. A copy of the Traffic Impact Assessment Report is included in the Environmental Assessment (EA) document.

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at 244-2015.

Very truly yours,



Erin Mukai, Manager

EM:yp
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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MAR 23 2018

ALAN M. ARAKAWA
Mayor

STEWART STANT
Director

MICHAEL M. MIYAMOTO
Deputy Director

MICHAEL RATTE
Solid Waste Division

ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2050 MAIN STREET, SUITE 2B
WAILUKU, MAUI, HAWAII 96793

March 15, 2018

Ms. Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

SUBJECT: WAILUKU AFFORDABLE HOUSING PROJECT (LEGACY WAILUKU, LLC) EARLY CONSULTATION REQUEST FOR PROPOSED SECTION 201-H, HAWAII REVISED STATUTES (HRS) TMK (2) 3-5-001:064, WAILUKU

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:

   a. Developer shall apply to the Central Maui Landfill to dispose of construction waste and waste generated by project residents.

   b. Developer is correct in providing refuse service from a privately-managed source as County refuse service cannot be assured.

2. Wastewater Reclamation Division (WWRD) comments:

   a. Although wastewater system capacity is currently available as of the date of this letter, the developer should be informed that wastewater system capacity cannot be ensured until the issuance of the building permit.
   b. Provide discussion and calculations (sewer impact study) to substantiate that the existing wastewater system is adequate to serve this project.
   c. Wastewater contribution calculations are required before building permit is issued.
   d. Developer is not required to pay assessment fees for this area at the current time.

e. Developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.
f. Sewage calculations required to substantiate the slopes of the proposed sewer lines.
g. Show or list minimum slope of new sewer laterals.
h. Plans should shall the installation of a single service lateral and property sewer service manhole near the property line.
i. Commercial kitchen facilities and swimming pools 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 letter, please contact Michael Miyamoto at 270-8230.

Sincerely,

MICHAEL M. MIYAMOTO
Deputy Director of Environmental Management

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Michael Miyamoto, Deputy Director
County of Maui
Department of Environmental Management
2050 Main Street, Suite 2B
Wailuku, Hawai'i 96793

SUBJECT: Request for Early Consultation for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Miyamoto:

Thank you for your letter of March 15, 2018, providing early consultation comments for the Wailuku Apartment Rental Housing Project. We have summarized your comments and provide our responses below.

Solid Waste Division Comments:

a. *Developer shall apply to the Central Maui Landfill for the disposal of construction waste and waste generated by project residents.*
b. *County-provided refuse service cannot be assured.*

Response: The applicant's contractor will comply with applicable requirements for the disposal of construction waste. As noted, the project will utilize a private refuse service to serve the project's residents upon project completion.

Wastewater Reclamation Division Comments:

a. *Wastewater system capacity cannot be assured until the issuance of building permit.*
b. *Provide a sewer impact study to substantiate the adequacy of the existing wastewater system.*
c. *Wastewater contribution calculations to be provided prior to building permit issuance.*
d. *Developer is not required to pay assessment fees at the current time.*
e. *Developer is required to fund necessary off-site improvements to the collection system and pump stations.*

f. Sewage calculations are required to substantiate slopes of proposed sewer lines.

g. Show or list minimum slope of new sewer laterals.

h. Plans should show single service lateral and property sewer service manhole near the property line.

i. Commercial kitchen facilities and swimming pools shall comply with pre-treatment requirements.

j. Non-contact cooling water and condensate should not drain to wastewater system.

Response: A copy of your letter has been transmitted to the project's civil engineer. The comments provided will be addressed as part of the engineering design phase of project development. Construction plans will be circulated to the Department of Environmental Management for review and approval.

Thank you again for providing your early consultation comments for the Draft Environmental Assessment (EA). While your letter was not received in time to be included in the Draft EA, we will include your letter and our response in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at 244-2015.

Very truly yours,



Erin Mukai, Manager

EM:yp
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Darren Unemori, Warren S. Unemori Engineering
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APR 23 2018

ALAN M. ARAKAWA
Mayor

STEWART STANT
Director

MICHAEL M. MIYAMOTO
Deputy Director

MICHAEL RATTE
Solid Waste Division

ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2050 MAIN STREET, SUITE 2B
WAILUKU, MAUI, HAWAII 96793

April 17, 2018

Ms. Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

SUBJECT: WAILUKU APARTMENT RENTAL HOUSING PROJECT
DRAFT ENVIRONMENTAL ASSESSMENT
TMK (2) 3-5-001:064, WAILUKU

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 the date of this letter, the developer should be informed that wastewater system capacity cannot be ensured until the issuance of the building permit.
   b. Provide discussion and calculations (sewer impact study) to substantiate that the existing wastewater system is adequate to serve this project.
   c. Wastewater contribution calculations are required before building permit is issued.
   d. Developer is not required to pay assessment fees for this area at the current time.
   e. Developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.
   f. Sewage calculations required to substantiate the slopes of the proposed sewer lines.
   g. Show or list minimum slope of new sewer laterals.
   h. Plans should shall the installation of a single service lateral and property sewer service manhole near the property line.

i. Commercial kitchen facilities and swimming pools 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 letter, please contact Michael Miyamoto at 270-8230.

Sincerely,

MICHAEL M. MIYAMOTO
Deputy Director of Environmental Management

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Michael Miyamoto, Deputy Director
County of Maui
Department of Environmental Management
2050 Main Street, Suite 2B
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Miyamoto:

Thank you for your letter of April 17, 2018, providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we have summarized your comments and provide the following responses.

Solid Waste Division Comments:

a. *None.*

Response: We understand that the Solid Waste Division has no comments at this time.

Wastewater Reclamation Division Comments:

a. Wastewater system capacity cannot be assured until the issuance of building permit.
b. Provide a sewer impact study to substantiate the adequacy of the existing wastewater system.
c. Wastewater contribution calculations to be provided prior to building permit issuance.
d. Developer is not required to pay assessment fees at the current time.
e. Developer is required to fund necessary off-site improvements to the collection system and pump stations.

f. Sewage calculations are required to substantiate slopes of proposed sewer lines.

g. Show or list minimum slope of new sewer laterals.

h. Plans should show single service lateral and property sewer service manhole near the property line.

i. Commercial kitchen facilities and swimming pools shall comply with pre-treatment requirements.

j. Non-contact cooling water and condensate should not drain to wastewater system.

Response: A copy of your letter has been transmitted to the project's civil engineer. The comments provided will be addressed as part of the engineering design phase of project development. Construction plans will be circulated to the Department of Environmental Management for review and approval.

Thank you again for providing comments on the Draft Environmental Assessment (EA). A copy of your letter and our response will be included in the Final EA

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at 244-2015.

Very truly yours,



Erin Mukai, Manager

cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Darren Unemori, Warren S. Unemori Engineering
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ALAN M. ARAKAWA
Mayor

DON MEDEIROS
Director

JOHN L. BUCK III
Deputy Director

(808) 270-7511

MAY 10 2018

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
2145 Kaohu Street, Suite 102
Wailuku, Hawaii, USA 96793

May 4, 2018

Colleen Suyama, Senior Associate
Munekito Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Subject: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Project

Dear Ms. Suyama,

Thank you for incorporating our previous comments. We have no additional comments to make regarding this project at this time.

Please feel free to contact me if you have any questions.

Sincerely,

Don Medeiros
Director

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Don Medeiros, Director
County of Maui
Department of Transportation
2145 Kaohu Street, Suite 102
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Medeiros:

Thank you for your letter of May 4, 2018 regarding the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. The project Applicant, Legacy Wailuku LLC, acknowledges that the Department has no additional comments at this time.

Thank you again for providing your response on the Draft Environmental Assessment (EA). A copy of your letter and this response letter will be included in the Final EA.

Should you have any questions, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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ALAN M. ARAKAWA
Mayor

DAVID TAYLOR, P.E.
Director

GLADYS C. BAISA
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

May 8, 2018

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793

Re: Draft Environmental Assessment (DEA) and Anticipated Findings of No Significant Impact (FONSI) for the Proposed Wailuku Apartment Rental Housing Project
TMK: (2) 3-5-001:064
Location: Waiale Road, Wailuku, Hawaii

Dear Ms. Suyama,

Thank you for the opportunity to comment on the Wailuku Apartment Rental Housing Project DEA and anticipated FONSI. The applicant anticipates a Section 201H-38, Hawaii Revised Statutes, approval for the development of a workforce housing project.

Storm Water Retention, Pollution, and Consumption
The Department of Water Supply (DWS) made a previous comment letter dated October 23, 2017 (attached). Conditions, requests, and recommendations stand with some additions. DWS recommends the storm water design include aquifer recharge capabilities on site in addition to diverting water away from the development as is indicated in the plans. Pre and post surface water runoff calculations reveal an increase of nearly four times the original flow rate. (Compare pre-development surface runoff draining to Kehalani Waiale Drainage Basin flow rate of 7.9 ft^3/sec. with a post-development surface runoff draining to Kehalani Waiale Drainage Basin flow rate of 29.7 ft^3/sec.) Maintain retention areas with permeable surfaces. It is in the community's best interest to regard storm water as a resource and maintaining some runoff on site improves the quality of storm water runoff preventing the pollution of this wellhead protection area. (See attached comment letter.)

The project could be subject to the limitations set forth in Title 16, Chapter 201, of the County Administrative Rules, Rules Relating to Water Service and Large Quantities of Water. One

hundred ninety five units are anticipated to qualify as affordable units while one hundred twenty nine units are designated market rate. According to Water System Standards, Hawaii, 2002, water demand for the 129 market rate units will be 72,240 gallons per day which is not exempt from Title 16 Rules Relating to Water Service and Large Quantities of Water. Please contact DWS Engineering for further information.

Should you have any questions, please contact staff Planner Audrey Dack at (808) 463-3109 or audrey.dack@co.maui.hi.us.

Sincerely,

Gladys C. Baisa, Deputy Director

apd

cc: DWS engineering division
Attachments

ALAN M. ARAKAWA
Mayor

DAVID TAYLOR, P.E.
Director

GLADYS C.BAISA
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

October 23, 2017

Mr. Vince Bagoyo, Project Consultant
Bagoyo Development Consulting Group
1500 Kilinoe Place
Wailuku, Hawaii 96793

Re: Draft Environmental Assessment (DEA) for the Proposed Wailuku Apartment Rental Housing Project, Waiale Road, Wailuku
TMK: (2) 3-5-001:064

Dear Mr. Bagoyo,

Thank you for the opportunity to comment on the DEA for the proposed Wailuku Apartment Rental Housing Project.

Source Availability, System Infrastructure and Consumption
The project area is served by the Central system and overlies the Iao aquifer, with a sustainable yield of 20 million gallons per day (gpd) according to the Commission on Water Resource Management.
The Department of Water Supply (DWS) maintains an 8-inch water line that runs parallel to Kuikahi Drive as well as an 18-inch water transmission line adjacent to the east property line. The nearest fire hydrant is within 150' of the site, at the corner of Waiale Road and Kuikahi Drive. There is no DWS meter on the parcel, which is subject to the County's Availability Policy, as codified in Title 14 of the Maui County Code. System requirements will be determined in the subdivision process. Please consult with DWS Engineer Tammy Yeh at 808-270-7835 for further information.
The document states that the projected water demand is 188,940 gpd, which is consistent with the guidelines set in Hawaii Water System Standards, 2002.

Aquifer Protection and Best Management Practices (BMPs)
We are pleased to note that the landscape plan includes installing native plant species, which help to conserve water and protect the Iao aquifer from further degradation. We recommend that the plants be watered using a dripline (in lieu of spray) irrigation system with rain sensors, and that all irrigation be scheduled between 7 PM and 7 AM, no more than twice weekly once plants are established.
The density of the project includes a large percentage of lot coverage with impermeable surfaces, which, with the exception of the drainage basin, limits the aquifer recharge. The entirety of the proposed project lies within the DWS two year time of travel wellhead protection (WHP) area. The WHP areas are delineated into two zones, the ten and two (closer to the well) year time of travel zones. Because the project lies within the two year time of travel zone, in an area that is more sensitive to pollutants that could enter the Iao aquifer and migrate to the well intake location, BMPs should be thoroughly implemented.

We recommend including parking with permeable surfaces, reducing runoff and improving aquifer recharge. The attached as well as the following BMPs designed to prevent contamination and protect groundwater should be noted in the EA and implemented:

1. Sweep parking lots and other paved areas periodically to remove debris. Dispose of debris in the garbage.
2. Post signs to control litter and prevent auto maintenance activities such as changing fluids or washing cars, which should not be allowed on the property.
3. Wash water from all cleaning operations must be discharged to the sanitary sewer.
4. Keep dumpster areas free of litter and lids closed.
5. Avoid mixing or using pesticides, fertilizers, herbicides, degreasers, fuels, or other pollutants onsite.

Should you have any questions, please call Staff Planner Audrey Dack at (808) 463-3109 or email audrey.dack@co.maui.hi.us.

Sincerely,

David Taylor, P.E. Director

mlb
cc: DWS Engineering Division

Best Management Practices (BMPs)

Construction BMPs

- Prevent cement products, oil, fuel and other toxic substances from falling onto the ground as they can leach into the water table. Remove all construction debris and toxic substances daily.
- Maintain vehicles and equipment to prevent oil or other fluids from leaking. Concrete trucks and tools used for construction should be rinsed off-site.
- Properly install and maintain erosion control barriers such as silt fencing or straw bales.
- Disturb the smallest area possible.
- Keep runoff on site.
- Use reclaimed water as an alternative source of non-potable water for dust control during construction. Kahului Wastewater Treatment Plant provides reclaimed water at a reasonable cost.
- Properly and promptly dispose of all loosened and excavated soil and debris material.

Conservation BMPs – Indoor

- Use EPA WaterSense labeled plumbing fixtures.
- Install flow reducers and faucet aerators in all plumbing fixtures wherever possible.
- Install dual flush toilets with high efficiency models that use 1.28 gallons per flush or less.
- Install showerheads with a flow rate of 1.5 gallons per minute (gpm) at 60 pounds per square inch (psi).
- Install bathroom sink fixtures that do not exceed 1 gpm at 60 psi.
- Laundry facilities should use Energy Star labeled washers.

Conservation BMPs – Outdoor

- Retain groundcover until the last possible date. Stabilize denuded areas by sodding or planting as soon as possible. Use high seeding rates to ensure rapid stand establishment.
- Limit turf to as small an area as possible.
- After plants are established, avoid fertilizing to stimulate growth.
- Use Smart Approved WaterMark irrigation products. Examples include evapotranspiration irrigation controllers and drip irrigation.

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Gladys C. Baisa, Deputy Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawai'i 96793-2155

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Ms. Baisa:

Thank you for your letter of May 8, 2018 providing comments on the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. On behalf of Applicant, Legacy Wailuku LLC, we have summarized your comments and provide the following responses.

Comment No. 1:

The Department has previously provided comments via letter dated October 23, 2017. Comments reflected in that letter are still applicable with some additions. The DWS recommends aquifer recharge capabilities onsite in addition to diverting water away from the development. Maintain retention areas with permeable surfaces; it is in the community's best interest to regard storm water as a resource.

Response: Your comments of October 23, 2017 have been provided to the project's civil engineer. In this regard, appropriate coordination with the Department's Engineering Division will be undertaken as project design progresses. In addition, the Applicant has been provided with the Department's recommended Best Management Practices (BMPs), as it relates to aquifer protection. These recommendations will be provided to the managing agency once the project is completed and occupied. The Wailuku Apartment Rental Housing Project will also be implementing onsite filtration measures (as described in the Preliminary Engineering Report, **Appendix "B"**) to remove pollutants from project-generated stormwater runoff to further protect the community's water resources.

As you have noted, post-development stormwater runoff will be directed to offsite drainage retention and detention basins. The Waikapu Detention Basin, Waiale Retention Basin, as well as a dry overflow basin adjacent to the Waiale Reservoir will receive stormwater flows. These areas are unlined and provide aquifer recharge opportunities. In addition, the existing vegetated drainage channel which traverses the project site, conveying runoff to the Waikapu Detention Basin, and the existing vegetated drainage gulch (along the property's southern boundary) conveying runoff to the dry overflow basin, serve as recharge areas for residual stormwater which remain onsite within the respective channels (grassed lining will keep flows from fully discharging offsite).

Comment No. 2:

The project could be subject to Title 16, Chapter 201 of the County Administrative Rules, Rules Relating to Water Service and Large Quantities of Water.

Response: Based on discussions with the Department's Engineering Division, we understand that pursuant to Title 16, Chapter 201 of the County Administrative Rules, the proposed Wailuku Apartment Rental Housing Project falls within the following definition of "large quantities of water":

> *In a department potable water system where the estimated three year forecast for water usage is below 88 percent of the department's maximum reliable capacity, an applicant's request for water service from the department for new or additional uses is more than 120,000 gallons per day.*

We further understand that 40 percent of the project's total water demand (market component), plus the demand of the project's swimming pool appears to be well-below the 120,000 gallons per day threshold. Notwithstanding, the Applicant and their project engineer will continue coordination with the Department's Engineering Division to ensure compliance with applicable provisions of Title 16, Chapter 201.

Thank you again for providing your comments on the Draft Environmental Assessment (EA). A copy of your letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at (808) 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Darren Unemori, Warren S. Unemori Engineering, Inc.
Vince Bagoyo, Bagoyo Development Consulting
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APR 25 2018

Maui Economic Opportunity, Inc.

P.O. Box 2122
Kahului, HI 96733
808-249-2990
Fax: 808-249-2991
www.meoinc.org

April 23, 2018

Colleen Suyama, Senior Associate
Muneyiko Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Suyama,

We do not have any comment on the Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project.

Thank you for seeking community comments.

Mahalo nui loa,

Debbie Cabebe, SPHR
Chief Executive Officer

The Promise of Community Action
Community Action changes people's lives, embodies the spirit of hope, improves communities, and makes America a better place to live. We care about the entire community, and we are dedicated to helping people help themselves and each other.

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Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Debbie Cabebe, SPHR, Chief Executive Officer
Maui Economic Opportunity, Inc.
P.O. Box 2122
Kahului, Hawai'i 96733

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Ms. Cabebe:

Thank you for your letter of April 23, 2018, acknowledging receipt of the subject Draft Environmental Assessment (EA). We appreciate your time reviewing the document, and understand that you do not have any comments at this time.

Thank you again for Maui Economic Opportunity's consideration of the Draft EA. A copy of your letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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JUN 15 2018

June 12, 2018

Ms. Colleen M. Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama,

Subject: Wailuku Affordable Housing Project by Legacy Wailuku, LLC
Early Consultation Request for Proposed Section 201-H
Wailuku, Maui, Hawaii
Tax Map Key: (2) 3-5-001:064

Thank you for allowing us to comment on the the subject project.

In reviewing our records and the information received, Maui Electric Company, Limited has no objection to the project at this time. However, we highly encourage the customer's electrical consultant to submit the electrical demand requirements and project time schedule as soon as practical so that any service upgrade or new service can be provided on a timely basis.

Should you have any other questions or concerns, please feel free to call me at 871-2340.

Sincerely,

R. Okazaki

Ray Okazaki
Engineer II, Engineering

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
PRESIDENT
Karlynn K. Fukuda
EXECUTIVE VICE PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

June 28, 2018

Ray Okazaki, Engineer II
Engineering Division
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawai'i 96733

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Okazaki:

Thank you for your letter of June 12, 2018, regarding the subject Chapter 343, Hawai'i Revised Statutes (HRS) document. The project Applicant, Legacy Wailuku LLC, acknowledges that Maui Electric Company, Ltd. (Maui Electric) has no objections to the project at this time. We also confirm that electrical demand requirements and the project time schedule will be provided to Maui Electric as early as practicable in the design process.

Thank you again for providing your response on the Draft Environmental Assessment (EA). A copy of your letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at erin@munekiyohiraga.com or by phone at 244-2015.

Very truly yours,

Erin Mukai, Manager

EM:lh
cc: Linda Schatz, Schatz Collaborative
Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
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May 8, 2018

To: **Mr. Ken Takahashi,** (808) 587-0547, ken.t.takahashi@hawaii.gov
677 Queen Street, Room 300, Honolulu, HI 96813
To: **Ms. Linda Schatz** (808) 428-8717 lindaschatz@schatzcollaborative.com
Legacy Wailuku, LLC; 114 Olomana Lane, Honolulu, Hawaii 96813
To: **Mr. Michael Munekiyo**, AICP, (808) 244-2015, planning@munekiyohiraga.com
Munekiyo Hiraga; 305 High Street, Suite 104, Wailuku, Hawaii 96793
To: **Mr. Vince Bagoyo** 808-357-3842 vbagoyo-devgroup@hawaii.rr.com
V. Bagoyo Development Consulting Group, LLC 1500 Kilinoe Pl., Wailuku, HI 96793

From: Maui Tomorrow Foundation
55 N. Church St. Ste A4
Wailuku, HI 96793

Michael Williams, Chair, Affordable Housing Committee, Maui Tomorrow Foundation
MichaelWilliams@PueoFarm.com
808-264-4884

Re: Revised Wailuku Apartment Rental Housing Project DEA (AFNSI)

Since much of the material in this revised draft EA is similar to the original draft EA, and because the response comments by Bagoyo Development Consulting Group did not adequately respond to our original comments, MTF is resubmitting parts of its original October-2017 letter with some supplementary material commenting on revisions in the draft EA.

This revised EA has improved upon the original DEA document in some respects, which we acknowledge below.

Many affordable housing projects are needed on Maui, but this one should not be called "affordable" because it includes too many market units resulting in a very crowded project with undesirable impacts; far too many 201-h exemptions that will cost the community more than the construction of a few "affordable units; and many severe impacts (some disclosed and others not described) that trigger the legal requirement of a complete EIS, (not just an EA with a FONSI).

Specific comments on the Wailuku Apartment Rental Housing Project D-EA (AFNSI):

1. **Full EIS**: This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do exist, a full Environmental Impact Statement (EIS) is legally required. the Hawai'i Housing

Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project, should undertake a full EIS to examine the many significant impacts and how they will be mitigated.

2. **Implementation**: This REVISED Housing Project DEA mentions numerous significant and adverse impacts (intersections at "F levels", schools already beyond capacity, distance from parks with no safe routes, distant bus stops, etc.) and discusses some possible mitigating solutions, but it does not promise to implement the needed mitigations.

3. **Exemptions**: The Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, fire safety standards, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes (DEA p 5).

The document includes an absurdly high number of major exemptions (18 pages listed on D-EA pages 208-213, and in more detail on PDF Pages 1147-1158) that are being requested. The very fact that these 18 pages of exemptions (the most we have yet to see in any 201H-38 project) are included means that there are numerous significant impacts that the applicant wishes to not disclose. Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, and so on, must be discussed and mitigated. They are not.

4. **Traffic**: The Draft-EA's major omissions relate to traffic (PDF 55-73 + Appendix H).

4.1 The Draft-EA TIAR traffic analysis has selectively underestimated the future impacts from several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center.

Both of these projects have already received initial entitlements, and it is likely that they will soon be impacting this 201H apartment project's traffic in a _significant, adverse manner. Similarly, this Wailuku Apartment Rental Housing will be impacting the traffic of those projects. A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts. Those other projects in their full EISs provided comprehensive TIAR information, but they did not include this Wailuku Apartment Rental Housing in their TIAR analysis. Just as the serious, adverse traffic impacts of those projects required a full EIS, so does the cumulative traffic impacts of this one. Traffic jams are the result of the total effect of all traffic in the immediate area. This projects traffic effects will overwhelm the surrounding streets and intersections unless the County first or at least simultaneously widens some of the nearby roads.

4.2 In addition to not completely considering the planned growth of nearby projects, the DEA has not considered the effects of new highways that will affect the flows of traffic. For example, if the Waiale Road is extended southward to Honopiilani Hwy. there will be a great increase on all of the intersections on Waiale Road, especially those near this project. (See PDF 933:

The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, since they are unlikely to be built by Year 2021 given their current status, these roadway improvements were not included in this TIAR. They should have been included. A full EIS would evaluate the cumulative impacts of this project once such roadway changes have been made.

Once all of the following housing rojects are completed, it is likely that the cumulative future traffic being generated from these five nearby projects could significantly and adversely affect the already very limited roads in the area: Waikapu (1,440) +adjacent Waiale Road projects (146) + A&B Waiale (2,550) + Maui Lani (935) + Kehalani (956) + this Wailuku Apt. project (324)} = 6,351 units in this already congested area. The HHFDC and the Maui Planning Organization (MPO) should require that, along with the other developers, Wailuku Apartment Rental Housing Project provide a "fair share" of the cost of a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems. The HHFDC and MPO should also require this Wailuku Apartment Rental Housing project to pay its "fair share" to upgrade the highways, roads and intersections in this area.

4.3 Even though this project will not be completed until at least 2021, the TIAR has used 2021 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

5. **Housing Unit Numbers**: Draft-EA Page 16: Although this project is being described as a 201H affordable housing rental project, only 110 out of 324 units (only 34% of the units) are for those under 100% of Maui's median income (the AMI). In other words, 214 units (the vast majority) are for those families with incomes above the median Maui family income, either as 190 market units or 24 higher rent affordables.

This is hardly an affordable housing project if over half the people in Maui would be unable to afford to rent a unit in the project. The HHFDC should not allow an apartment project of this density, with so many 201H exemptions, unless at least half of the units are affordable to those earning less than 100% of the average family income.

With regard to the number of available units, and especially the number of available affordable units, there are inconsistencies in the Draft-EA. For example: It clearly states on PDF page 25 that the affordable units will be rented out only to those between 80% and 140%. However, on the immediately preceding page in table 2 it indicates that there will be 55 units rented out to those between 51 to 80%. Which is the plan?

Another example: throughout the draft EA it is stated that there will be 324 total units. However in the table on PDF page 906, a total of 301 units is used.

6. **This project is actually a short term rental hotel for off-shore residents.** The DEA cites as good authority a "Central Maui Market Rental Study" (pdf pages 24-25, internally numbered as pp 8-9), from their consultant, which reveals the real, intended market for this project. This Study is attached as Appendix G to the DEA, pp 850 to 907 of the pdf.

On page 881:

"The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to *offshore demand* in a significant way - significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a *3-month lease period* is important, as that can take advantage of *seasonal demand* - meaning the winter and the summer 'high' periods.' (Emphasis added.)

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"A good part of the demand for these units - especially studios, we believe - would be the market to enjoy a 3-4 month stay - using these units as a substitute for hotel rooms."

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"We expect that Maui's visitor industry will continue to enjoy success and thereby **cultivate amongst a portion of the shortterm visitors a desire to lengthen their stay the following trip by renting a unit for 3 months, the minimum period for this project.** We expect the demand here coming out of Canada and the northern states of the US." (Emphasis added.)

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"We see all sources of demand being present and accounted for . . . Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility. **We suggest there be a healthy mix, as the local presence will make the project more attractive to the offshore rental demand**." (Emphasis added.)

Page 905:

"There will be additional demand from offshore renters. It may be likely that **offshore demand might even be as high as a quarter or a third of the units**. A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that **there is an apparent offshore demand for these types of units**." (Emphasis added.)

Page 906:

"PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bed room unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bed room unit, as that has the deepest demographic, as an affordable unit. **Plus, we expect very good offshore demand for a small unit, such as this.**

"Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families. **We also see a good potential demand for renting them out on the minimum lease of 3 months to offshore visitors**, grandparents who will cycle their grandchildren through the unit over the summer or winter months." (Emphasis added.)

Maui County has been taking steps to rein in the explosive growth of short term rentals outside hotel zones. This project should not be allowed so many exemptions if it is not meeting the need for more long term housing of local residents.

7. **Population**: The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.

8. **Schools** which will service the Wailuku Apartment Rental Housing Project's many families, are all significantly over capacity now.

> **"Pu'u Kukui Elementary School** is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years. **Maui Waena Intermediate School** is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years. **Maui High School** is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years." (Draft-EA PDF page 53)

The Applicant has tried to mitigate this objection to its first DEA by agreeing to pay the small school impact fee to the State (far less than $1 million), but this amount will not begin to satisfy the DOE's ability to build the additional classrooms or improve the schools' capacities.
South Maui cannot even gets its high school built.

9. **Finances**: Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Apartment Rental Housing project. They have already received several entitlements without trying to get any 201-h exemptions.

10. **Play Areas and Parks**: The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great. Among the 1,000 residents there will be many toddlers who will be able to use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). But the greater impact will fall on the 100+ children of school age. These children will need to get to parks and playing fields along streets lacking bicycle routes and with minimum sidewalks and by crossing several very busy and dangerous high traffic avenues.
The so called "swimming pool" appears to be merely a small wading pool, totally insufficient for 1,000 residents.

11. **Solid Waste**: The Draft-EA does not show any locations for solid waste disposal / trash bins. There will be many of these for 324 units. Nor does it seem that big rubbish trucks will

able to turn around at the end of the 300'+ driveway. Backing up early in the morning will be a noisy disturbance. The response to this statement in my previous letter was incomplete and inadequate, only that the developer would look into it. However, that did not happen.

12. **Pedestrian Safety**: This revised DEA has many improved safety features for pedestrians: sidewalks on Kuikahi and a cross-walk from the project to Foodland and Longs.

Unfortunately, there is only a partial sidewalk along Waiale Road. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. To get to the nearby stores they will need a complete sidewalk along Waiale and it should be provided south of the Waiale Road exit/entrance. Because the project can gain 201H approval only if "the proposed housing project is consistent with the purpose and intent of Section 201H-38, HRS, and the project's design meets all health and life safety requirements per the building code and Maui County Code."

13. **A&B's 2,550 unit Waiale project:** Maps on PDF pages 18 +35 and throughout the DEA do not show the major project to the South and to the East. The map and text should include the largest project (A&B's 2,550 unit Waiale project), the one that will have the greatest impact on the proposed Wailuku Apt project, and vice versa will be affected by this Wailuku Apartment project.

14. **Water:** The Draft-EA PDF Pages 44 + 45 and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gallons for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with sizeable affordable units)?

15. **Parking**: The original draft contained only 486 parking stalls. This DEA has over 600. How was this change made? Have all the stalls been reduced in width/size? Will there be adequate parking space for pick-ups and larger vehicles? Special visitor parking? Handicapped parking?

16. **300 foot+ driveway, cul-du-sac**: Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night with 600+ cars, firetrucks will not be able to access all buildings because they cannot turn around, or even safely back-up. The DEA claims this safety danger is mitigated by sprinklers in the apartments, but this safety hazard by itself is a severe impact requiring a full EIS under the law.

17. **Project Management**: Will the County ever have any responsibilities if Legacy goes out of business? (Repairs? Ownership? Management? Utilities? Insurance? etc.)
Who will manage the property? Establish homeowner association fees?
These impacts are simply ignored.

18. **Long-Term:** After the 30 years what will happen? Will renters ever have the right to purchase? Will rents suddenly rise?

Mahalo for allowing us the opportunity to share our comments on the Draft-EA and to make our concerns known,

Michael L. Williams

Chair, Maui Tomorrow Foundation Affordable Housing Committee

CC Maui County Councilmember Stacey Crivello, Chair, Housing Committee
Maui County Councilmember Kelly King, Chair, Planning Committee
Maui County Councilmember Alika Atay, Wailuku Resident Councilmember
Director Carl Reimann, Maui County Housing and Human Affairs Department
Director Will Spence, Maui County Planning Department

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June 28, 2018

Michael Williams, Chair,
Affordable Housing Committee
Maui Tomorrow Foundation
55 North Church Street, Suite A4
Wailuku, Hawaii 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Williams:

Thank you for your letter of May 8, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We have restated your comments in the order presented in your letter and have provided responses to each, as follows:

Comment No. 1:

Full EIS: *This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do exist, a full Environmental Impact Statement (EIS) is legally required. the Hawai'i Housing Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project, should undertake a full EIS to examine the many significant impacts and how they will be mitigated.*

Response:

The project's technical characteristics and related impact considerations were thoroughly evaluated by Legacy Wailuku LLC, the Applicant, and the Hawaii Housing Finance & Development Corporation (HHFDC), the Approving Agency. In accordance with Hawaii Administrative Rules (HAR), Section 11-200-12, Significance Criteria, every phase of the 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 were considered. The analysis contained in the Draft Environmental Assessment (EA) was supported through in-depth technical studies that were prepared by qualified professionals, and which were then reviewed by agencies having jurisdiction and expertise in their respective fields of authority. Each section of the Draft EA included a discussion and analysis of the impacts related to the respective environmental, infrastructural, public service and socio-economic parameters. The assessment of each significance criteria set forth in Section 11-200-12, HAR is included as Chapter X of the Draft EA.

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This chapter will be carried forward to the Final EA. The need for a full Environmental Impact Statement (EIS) is not deemed warranted in the context of the level of impacts, analysis and mitigation measures documented in the Draft EA.

***Comment No. 2*:**

Implementation: *This REVISED Housing Project DEA mentions numerous significant and adverse impacts (intersections at "F levels", schools already beyond capacity, distance from parks with no safe routes, distant bus stops, etc.) and discusses some possible mitigating solutions, but it does not promise to implement the needed mitigations.*

***Response*:**

Where mitigation measures are required due to potential impacts attributed to the project, Legacy Wailuku LLC will implement those applicable measures, including measures to address impacts related to traffic, access to recreational facilities and access to bus stops. As a disclosure document, the Draft EA has allowed agencies to comment on the identified mitigation measures. If more specific mitigation measures are raised by agencies as project development advances, Legacy Wailuku LLC will continue dialogue with the applicable agencies to define how such measures can be addressed as part of the project engineering and design phases of work. As a Section 201H project, HHFDC, and the Maui County Council will be engaged in the process of ensuring that conditions or modifications requested of the applicant are complied with. In summary, Legacy Wailuku LLC seeks to be transparent in the 201H process to ensure that mitigation solutions are appropriately implemented.

Comment No. 3:

Exemptions: *The Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, fire safety standards, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201 H-38, Hawaii Revised Statutes (DEA p 5).*

The document includes an absurdly high number of major exemptions (18 pages listed on DEA pages 208-213, and in more detail on PDF Pages 1147-1158) that are being requested. The very fact that these 18 pages of exemptions (the most we have yet to see in any 201 H-38 project) are included means that there are numerous significant impacts that the applicant wishes to not disclose. Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, and so on, must be discussed and mitigated. They are not.

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Response:

Legacy Wailuku LLC has recently undergone a vetting process for the requested exemptions with County agencies having jurisdiction over the applicable provisions of the Maui County Code. As a result, the list of exemptions is being revised, reduced, and streamlined to ensure that only those exemptions necessary to advance affordability while maintaining public health and safety, are proposed through the Section 201H process. The revised list of exemptions will be included in the Final EA and are not outside of the realm of what has been asked for in the past by other 201H projects. The lengthy number of pages represents Legacy Wailuku LLC's dedication to transparency and thoroughness in explaining the value, rationale, and specific purpose for the project. This thoroughness in explanation creates a lengthy document but the number of exemptions remains in line with other 201H projects that have been approved in the past by the Maui County Council. The final list of exemptions will be considered by the HHFDC and the Maui County Council in their respective decision-making processes for the 201H application.

Comment No. 4:

Traffic: *The Draft-EA's major omissions relate to traffic (PDF 55-73 +Appendix H).*

Comment No. 4.1:

The Draft-EA TIAR traffic analysis has selectively underestimated the future impacts from several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center.

Both of these projects have already received initial entitlements, and it is likely that they will soon be impacting this 201 H apartment project's traffic in a significant, adverse manner. Similarly, this Wailuku Apartment Rental Housing will be impacting the traffic of those projects. A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts. Those other projects in their full EISs provided comprehensive TIAR information, but they did not include this Wailuku Apartment Rental Housing in their TIAR analysis. Just as the serious, adverse traffic impacts of those projects required a full EIS, so does the cumulative traffic impacts of this one. Traffic jams are the result of the total effect of all traffic in the immediate area. This projects traffic effects will overwhelm the surrounding streets and intersections unless the County first or at least simultaneously widens some of the nearby roads.

Response:

The Traffic Impact Assessment Report (TIAR) recognizes that the initial phase of the Waikapu Country Town project may be implemented by the Wailuku Apartment Rental Housing Project's 2021 base year. The TIAR also assumes that A&B's Waiale Project is unlikely to have units constructed by the base year. These assumptions, together with the accounting of ambient growth

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in the overall Wailuku region, were based on the traffic engineer's knowledge of local development conditions and the progress of specific proposed actions. The technical basis for and analysis of traffic impacts documented in the TIAR have been reviewed by the State Department of Transportation and the County Department of Public Works. The TIAR is considered to meet the traffic engineering reporting standards and quality control criteria.

Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help implement the regional traffic improvements cited in the TIAR. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income.

In summary, we believe that the project's TIAR appropriately addresses technical methodology requirements for analysis of project-related traffic impacts.

Comment No. 4.2:

In addition to not completely considering the planned growth of nearby projects, the DEA has not considered the effects of new highways that will affect the flows of traffic. For example, if the Waiale Road is extended southward to Honopiilani Hwy. there will be a great increase on all of the intersections on Waiale Road, especially those near this project. (See PDF 933:

The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, since they are unlikely to be built by Year 2021 given their current status, these roadway improvements were not included in this TIAR. They should have been included. A full EIS would evaluate the cumulative impacts of this project once such roadway changes have been made.

Once all of the following housing projects are completed, it is likely that the cumulative future traffic being generated from these five nearby projects could significantly and adversely affect the already very limited roads in the area: Waikapu (1,440) +adjacent Waiale Road projects (146) + A&B Waiale (2 ,550) +Maui Lani (935) + Kehalani (956) +this Wailuku Apt. project (324)} = 6,351 units in this already congested area. The HHFDC and the Maui Planning Organization (MPO) should require that, along with the other developers, Wailuku Apartment Rental Housing Project provide a "fair share" of the cost of a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems. The HHFDC and MPO should also require this Wailuku Apartment Rental Housing project to pay its "fair share" to upgrade the highways, roads and intersections in this area.

Response:

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The TIAR, which was updated in May 2018, recognizes that both the Waiale Road Extension and improvements to Waiko Road are planned improvements, but are not anticipated to be completed before the base year of 2021.The Chapter 343, HRS process for those projects will address their respective impacts prior to their implementation. With the potential changes in traffic volumes on Waiale Road as a result of these projects, the consideration of regional mitigation measures cited in the TIAR would appear to be appropriate complementary actions which can be implemented.

As noted above, Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help fund either comprehensive traffic studies or implement the regional traffic improvements cited in the TIAR. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income. As with other impact fees which may affect affordability, we support exemptions to impact fees which may adversely affect the ability to provide affordable housing to local residents.

Comment No. 4.3:

Even though this project will not be completed until at least 2021, the TIAR has used 2021 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

Response:

The TIAR considered trip generation from other projects having reasonable probability of being completed by the Base Year of 2021. The study used traffic engineering methodology and assumptions which are considered reasonable and appropriate. Importantly, the TIAR recognizes regional improvements which may address existing peak hour congestion issues. Such regional improvement needs are best addressed through a comprehensive traffic impact fee system which can be equitably applied to projects without adversely affecting the equally important goal of providing affordable housing to local working families.

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Comment No. 5:

Housing Unit Numbers: *Draft-EA Page 16: Although this project is being described as a 201 H affordable housing rental project, only 110 out of 324 units (only 34% of the units) are for those under 100% of Maui's median income (the AMI). In other words, 214 units (the vast majority) are for those families with incomes above the median Maui family income, either as 190 market units or 24 higher rent affordables.*

This is hardly an affordable housing project if over half the people in Maui would be unable to afford to rent a unit in the project. The HHFDC should not allow an apartment project of this density, with so many 201 H exemptions, unless at least half of the units are affordable to those earning less than 100% of the average family income.

With regard to the number of available units, and especially the number of available affordable units, there are inconsistencies in the Draft-EA. For example: It clearly states on PDF page 25 that the affordable units will be rented out only to those between 80% and 140%. However, on the immediately preceding page in table 2 it indicates that there will be 55 units rented out to those between 51 to 80%. Which is the plan?

Another example: throughout the draft EA it is stated that there will be 324 total units. However in the table on PDF page 906, a total of 301 units is used.

Response:

This project falls within the affordability purview of the HHFDC which states, "The HHFDC establishes its affordability threshold for projects as those projects that primarily are affordable to households with incomes at or below 140% of the area median income.[1]" Maui County Code, Chapter 2.96 also requires an income group distribution for the affordable units to be one-third very low- and low-income (50-80% AMI), one-third at below-moderate income at 80-100% AMI, and one-third at moderate income at 100-120%AMI. Affordability definition according to HUD is based on housing costs (either owned or rented) that is no more than 30% of a household's income. Our project will produce units following HHFDC's affordable rental guidelines as noted in **Table 2** of our EA with a unit distribution following Maui County's Chapter 2.96 requirements.

[1] HHFDC 201H Application, http://dbedt.hawaii.gov/hhfdc/201h-development-assistance/, page 1

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Table 2. HHFDC Maui Affordable Rental Guidelines, Distribution of Units by Income Category and Rental Ranges

Area Median Income Level	Income Group	Number of Units	Rental Range*	Percentage of Units
51–80%	Low income	55	$627 - $1,616*	17%
81-100%	Low-moderate income	55	$1,123 - $2,107*	17%
101-120%	Low-moderate income	55	$1,453 - $2,598*	17%
121-140%	Moderate income	30	$1,783 - $3,089*	9%
Subtotal of Affordable Units		**195**		60%
N/A	Market	129	---	40%
Grand Total		**324**		**100%**

* Note: Rents are based on 2018 HHFDC Rent Guidelines minus utility allowance. These are subject to change based on annually published rent guidelines and utility allowances by State and County agencies.

The high cost of living, construction costs, and land costs create an affordability problem for a large portion of the island's population. Meeting state and county affordability requirements and allowing a mixture of market rate units help to cross-subsidize a truly mixed income community that is healthy and does not require direct government subsidies. The project, due to the unit count and mix of incomes can be privately financed. Most rental projects of this scale in Hawaii require direct county or state subsidies to be financed and yield a very small number of units to meet the demand for local housing.

Because of the lack of supply, many families with higher incomes who need to rent are competing with families that are at lower incomes, absorbing the existing housing stock. With the introduction of this project, we provide new units that families earning over 100% AMI can also afford, thereby freeing up older housing stock for families that need low- to low-moderate rental units. Accordingly, the ripple effect in the marketplace goes beyond just what this project has to offer.

Regarding our commitments to income levels, Legacy Wailuku LLC will be offering 17% of rental units that will have rent ranges from 51%-80% AMI; 17% of the units will have rents ranging from 81%-100%AMI, and so forth.

With regard to inconsistencies in unit counts cited on page 906 of the Central Maui Rental Market Study and the final count of 324 units reflected in Chapter I of the EA, we note that the market study was done in advance of more detailed design and site planning work, and the 301 unit count was a preliminary estimate used to inform project programming parameters. The unit count of 324 is the correct number based on the detailed architectural studies subsequently performed. Studies relating to engineering and traffic which require greater specificity in unit count numbers, based their work on 324 units.

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Comment No. 6:

This project is actually a short term rental hotel for off-shore residents. *The DEA cites as good authority a "Central Maui Market Rental Study" (pdf pages 24-25, internally numbered as pp 8-9), from their consultant, which reveals the real, intended market for this project. This Study is attached as Appendix G to the DEA, pp 850 to 907 of the pdf.*

On page 881:

> *"The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to offshore demand in a significant way - significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a 3-month lease period is important, as that can take advantage of seasonal demand - meaning the winter and the summer 'high' periods.' (Emphasis added.)*

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> *"A good part of the demand for these units - especially studios, we believe - would be the market to enjoy a 3-4 month stay - using these units as a substitute for hotel rooms."*

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> *"We see all sources of demand being present and accounted for ... Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility.* ***We suggest there be a healthy mix, as the local presence will make the project more attractive to the offshore rental demand."*** *(Emphasis added.)*

Page 905:

> ***"There will be additional demand from offshore renters****. It may be likely that* ***offshore demand might even be as high as a quarter or a third of the units****. A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that* ***there is an apparent offshore demand for these types of units."*** *(Emphasis added.)*

Page 906:

> *"PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bed room unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bed room unit, as that has the deepest demographic, as an affordable unit.* ***Plus, we expect very good offshore demand for a small unit, such as this.***
>
> *"Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and*

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above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families. ***We also see a good potential demand for renting them out on the minimum lease of 3 months to offshore visitors****, grandparents who will cycle their grandchildren through the unit over the summer or winter months." (Emphasis added.)*

Maui County has been taking steps to rein in the explosive growth of short term rentals outside hotel zones. This project should not be allowed so many exemptions if it is not meeting the need for more long term housing of local residents.

Response:

Legacy Wailuku LLC is presenting this project as a long-term rental with a 30-year deed restriction to maintain the affordability commitment. The market study considered all options prior to the design and planning of the project. The market researcher's opinions on what is highest and best use and survey of supply and demand are shared in the report. What Legacy Wailuku LLC does as a development program is an independent decision of what the market researcher notes as highest and best use.

Legacy Wailuku LLC will not utilize any unit for short-term vacation rentals. We agree that the current Maui market has a glut of short-term vacation rentals that is impacting the local long-term rental supply. All 324 units will be long-term rentals as committed to in our 201H application.

With respect to page 885 regarding short term rental studios, this is a recommendation of the market researcher studying the highest and best use for the market. It does not mean that Legacy Wailuku LLC will do this in our development program. Again, our 201H application/EA commitment is to have all 324 units utilized as long-term rentals to meet the local demand.

Similarly, Legacy Wailuku LLC is committed to the local rental market. Targeting the "offshore rental market" is not an objective of the project.

Comment No. 7:

Population: *The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.*

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.

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Response:

The Draft EA, through the Central Maui Rental Market Study (Cassiday, 2017; Appendix "G"), recognizes the demographic conditions leading to the need for more affordable rental units. The study acknowledges that the rental demand will be from local workforce families. The analysis of impacts presented in the Draft EA carefully examines each impact parameter (e.g., public services, infrastructure, etc.) and presents a thorough analysis of the impacts and related mitigation measures associated with each parameter. In conducting the analysis and in preparing the technical studies which are used as a basis for analyzing key parameters (e.g., traffic, infrastructure), there are no assumptions made as to the locational origin of prospective renters, nor are there assumptions made regarding the relationship of prospective tenant's locational origins and resulting level of impacts. We agree that impacts from the project should be independently analyzed irrespective of the relocation patterns of tenants.

Comment No. 8:

Schools *which will service the Wailuku Apartment Rental Housing Project's many families, are all significantly over capacity now.*

> ***"Pu'u Kukui Elementary School*** *is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years.* ***Maui Waena Intermediate School*** *is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years.* ***Maui High School*** *is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years." (Draft-EA PDF page 53)*

The Applicant has tried to mitigate this objection to its first DEA by agreeing to pay the small school impact fee to the State (far less than $1 million), but this amount will not begin to satisfy the DOE's ability to build the additional classrooms or improve the schools' capacities. South Maui cannot even gets its high school built.

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Response:

Legacy Wailuku LLC recognizes the current enrollment and capacity issues facing Central Maui schools, and is willing and ready to support and comply with the mitigation protocols that have been adopted by the Department of Education. Legacy Wailuku LLC also recognizes that school capacity concerns are community-wide issues, which must be addressed in the context of broader educational facilities capital improvements planning which will ensure quality education for our next generation of children. We understand that the provision of quality education must be equitably provided to residents of new housing units, whether located at Kehalani, Maui Lani or Waikapu, and that each housing provider will comply with impact fee requirements in place at the time of project implementation.

Comment No. 9:

Finances: *Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Apartment Rental Housing project. They have already received several entitlements without trying to get any 201-h exemptions.*

Response:

Legacy Wailuku LLC views the affordable housing crisis as one which requires multiple players, each able to contribute to the overall solution based on the level of expertise each is able to bring to the table. Development entities willing to help Maui's workforce families will approach the problem in ways which are unique, based on their respective long-term development objectives and housing development experience. Legacy Wailuku LLC is in a position to bring new affordable housing inventory to market in a relatively short timeframe, which is viewed as a positive outcome for the island's local families.

Both of the projects you reference also have the advantage of scale with thousands of units in their pipeline to spread costs and subsidize their affordability requirements. Their ratio of affordable to market is far less than what we are proposing. The Wailuku Apartment Rental Housing Project is not a large scale master planned community, but a 324-unit project with a distribution of 60% affordable and 40% market.

Comment No. 10:

Play Areas and Parks: *The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great. Among the 1,000 residents there will be many toddlers who will be able to use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the nccumber of young children who will be living here). But the greater impact will fall on the 100+ children of school age. These children will need to get to parks and playing fields along streets lacking bicycle routes and with minimum*

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sidewalks and by crossing several very busy and dangerous high traffic avenues.

The so called "swimming pool" appears to be merely a small wading pool, totally insufficient for 1,000 residents.

Response:

Access to recreational facilities by residents, both children and adults, of the proposed Wailuku Apartment Rental Housing Project is an important aspect of the project's proximity to existing infrastructure and services. Sidewalks provided by the project will provide pedestrian connectivity to the Waiale Park, located along Waiale Road, adjacent to the Hale Makana O Waiale apartments, and the Maui Lani Regional Park, located along Maui Lani Parkway. The Waiale Park is located approximately 0.25 mile from the project site, while the Maui Lani Regional Park is located approximately 0.9 mile from the project site. Both are accessible via signalized crosswalks and continuous sidewalks.

Comment No. 11:

Solid Waste: *The Draft-EA does not show any locations for solid waste disposal I trash bins. There will be many of these for 324 units. Nor does it seem that big rubbish trucks will be able to turn around at the end of the 300'+ driveway. Backing up early in the morning will be a noisy disturbance. The response to this statement in my previous letter was incomplete and inadequate, only that the developer would look into it. However, that did not happen.*

Response:

The project's design consultants will identify locations suitable for placement of trash bins. As with fire truck turnaround solutions being coordinated with the Department of Fire and Public Safety, turnaround areas for waste collection trucks will be configured into the final site plan to ensure that trash collection can be efficiently and safely conducted and managed. It is noted that the cost for waste collection service will be included as part of each tenant's monthly rental amount.

Comment No. 12:

Pedestrian Safety: *This revised DEA has many improved safety features for pedestrians: sidewalks on Kuikahi and a cross-walk from the project to Foodland and Longs.*

Unfortunately, there is only a partial sidewalk along Waiale Road. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. To get to the nearby stores they will need a complete sidewalk along Waiale and it should be provided south of the Waiale Road exit/entrance. Because the project can gain 201 H approval only if "the proposed housing project is consistent with the purpose and intent of Section

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201 H-38, HRS, and the project's design meets all health and life safety requirements per the building code and Maui County Code."

Response:

While the provision of sidewalks along the entire length of Waiale Road is desirable, there is no continuity of sidewalks provided along previously developed parcels which border Waiale Road. We would, however, be happy to discuss collaborative, nexus-based opportunities for the provisions of sidewalks along Waiale Road with the County of Maui and other landowners whose properties border Waiale Road.

Comment No. 13:

A&B's 2,550 unit Waiale project: *Maps on PDF pages 18 +35 and throughout the DEA do not show the major project to the South and to the East. The map and text should include the largest project (A&B's 2,550 unit Waiale project), the one that will have the greatest impact on the proposed Wailuku Apt project, and vice versa will be affected by this Wailuku Apartment project.*

Response:

The proposed Wailuku Apartment Rental Housing Project is anticipated to be completed and occupied by the year 2021. The context for project need recognizes that other development projects are ongoing, including new housing developments in Kehalani and Maui Lani. Other development proposals, including A&B's Waiale project, or other proposed projects within the Central Maui region, will contribute to meeting the island's housing needs. Collectively, in today's market, all projects, whether they be in Central Maui, South Maui, or West Maui, are considered complementary to addressing the housing shortage. Legacy Wailuku LLC does not view housing proposals in other locations of the island as being competitively detracting from the goal of providing housing to local families. We believe that all providers of new housing inventory join us in our goal of improving life quality on Maui.

Comment No. 14:

Water: *The Draft-EA PDF Pages 44 + 45 and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPO and 240,000 gallons for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with sizeable affordable units)?*

Response:

Legacy Wailuku LLC is working with the Department of Water Supply (DWS) to ensure that sufficient water source will be available to serve the project, while ensuring that other affordable

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projects will have the same opportunity to access water in accordance with Maui County Code Section 14-12. We note that Legacy Wailuku LLC views the provision of affordable housing as a significant public benefit, irrespective of who is able to meet this need. We support other providers of affordable housing and understand that each provider will have the same benefits provided by law with respect to water source availability.

Comment No. 15:

Parking: *The original draft contained only 486 parking stalls. This DEA has over 600. How was this change made? Have all the stalls been reduced in width/size? Will there be adequate parking space for pick-ups and larger vehicles? Special visitor parking?*
Handicapped parking?

Response:

Additional code compliant parking, from 486 stalls (original draft) to 661 stalls, was provided by making site plan adjustments and providing the allowable number of tandem stalls. All stalls are standard size 8'-6" x 18'. Loading spaces are provided and ADA accessible stalls are provided. In compliance with Maui County Code, there are 488 full size stalls, 163 full size tandem stalls, 8 accessible stalls and 2 stalls that are van accessible

Comment No. 16:

300 foot+ driveway, cul-du-sac: *Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night with 600+ cars, firetrucks will not be able to access all buildings because they cannot turn around, or even safely back-up. The DEA claims this safety danger is mitigated by sprinklers in the apartments, but this safety hazard by itself is a severe impact requiring a full EIS under the law.*

Response:

As part of the process of vetting the proposed project exemptions, Legacy Wailuku LLC has received preliminary comments from the County's Department of Fire and Public Safety. At present time, an exemption to Maui County Code, 16.04C, Fire Code will not be requested. The design team has met and will continue to meet with the Department of Fire and Public Safety during the early stages of preparing construction documents to address their concerns on fire protection, vehicular access, and to identify viable solutions for fire truck turnarounds.

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Comment No. 17:

Project Management: *Will the County ever have any responsibilities if Legacy goes out of business? (Repairs? Ownership? Management? Utilities? Insurance? etc.) Who will manage the property? Establish homeowner association fees?*
These impacts are simply ignored.

Response:

This project is privately financed without direct government subsidies. Therefore, if Legacy Wailuku LLC does go out of business then the lender and investors will take over ownership and management of the project. This would be subject to a Declaration of Land Use Restrictive Covenants to be recorded on the fee simple title of the property to ensure that affordability requirements are maintained pursuant to the 201H approval process. Legacy Partners and Pier Investments have a proven and strong track record that provides assurance that a reputable developer is managing this project. Legacy Wailuku LLC is also the management company responsible for insurance, utilities, repairs, etc. There are no homeowner association fees for this project.

These questions would be applicable for projects that use public funding to finance their projects. But again, as noted above, we are privately financed.

Comment No. 18:

Long-Term: *After the 30 years what will happen? Will renters ever have the right to purchase? Will rents suddenly rise?*

Response:

After the 30-year deed restriction expires, Legacy Wailuku LLC could renew their affordability commitment. Legacy Wailuku LLC could also offer the units for purchase, but such an alternative would require further coordination with the County of Maui. We are committed to providing tenants a "safety net" for housing. Any sudden increase in rents is contrary to our commitment to maintaining that "safety net".

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

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Should you have any questions regarding our responses, please feel free to contact me at email lindaschatz@schatzcollaborative.com or by phone at (808) 428-8717.

Very truly yours,

Linda Schatz

LS

cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Ben Lee, Clifford Planning & Architecture
Darren Unemori, Warren S. Unemori Engineering, Inc.
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Erin Mukai, Munekiyo Hiraga
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MAY 21 2018

From: Reid Kawabata
Sent: Monday, May 21, 2018 11:00:42 AM (UTC-10:00) Hawaii
To: Colleen Suyama
Subject: Response to Legacy Partners Environmental Assessment

Subject: Legacy Partners

Thank you once again for giving our community the opportunity to comment on Legacy Partners proposed rental project in Waikapu. After discussing this project with our Board Members last Monday we as a group decided to write separate comments. One thing that we all agree on is that this is a decent project if a little more affordable units could be added in for local families, adding even more parking, lowering the building heights, better planning for safety of our children and kupuna walking to schools or the shops in the area and a better traffic study, Please! Because no one will ever believe that from this project (2.5 cars x 324 units = 810 cars) only 22 cars will be added to the Morning peak traffic. Maybe even widen Waiale Rd In front of your project. Through these past years we have had about a dozen developers come through our community asking for approval to build within our boundaries and of these only two projects that kind of split the community apart. And with these two projects it just boiled down to the same concern, location location location. So please, we do need and want affordable units for local families however let's not ruin existing communities just for the sake of building. As for developers that wish to buy bigger properties be smart and talk with the communities before purchasing any land and not just listen to people that just tell you what you want to hear. And should you consider moving forward I'd recommend doing a full EIS with more studies.

Thank you,
Reid Kawabata
President Waikapu Community Association
Sent from my

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June 28, 2018

Mr. Reid Kawabata, President
Waikapu Community Association
P.O. Box 3046
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2) 3-5-001:064

Dear Mr. Kawabata:

Thank you for your email of May 21, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We offer responses to your concerns as follows.

Comment:

One thing that we all agree on is that this is a decent project if a little more affordable units could be added in for local families, adding even more parking, lowering the building heights, better planning for safety of our children and kupuna walking to schools or the shops in the area and a better traffic study, Please! Because no one will ever believe that from this project (2.5 cars x 324 units = 810 cars) only 22 cars will be added to the Morning peak traffic. Maybe even widen Waiale Rd In front of your project. Through these past years we have had about a dozen developers come through our community asking for approval to build within our boundaries and of these only two projects that kind of split the community apart. And with these two projects it just boiled down to the same concern, location location location. So please, we do need and want affordable units for local families however let's not ruin existing communities just for the sake of building. As for developers that wish to buy bigger properties be smart and talk with the communities before purchasing any land and not just listen to people that just tell you what you want to hear. And should you consider moving forward, I'd recommend doing a full EIS with more studies.

Response:

We understand the concerns of the Waikapu Community Association as it relates to the number of affordable units, parking, building heights and safety for our children and kupuna, and traffic. The project site and development parameters have been updated, as reflected in the March 2018 Draft Environmental Assessment (EA). Based on information presented in the Draft EA, we note the following:

- The opportunity to provide as many affordable rental units as possible has been the subject of various feasibility analyses undertaken by Legacy Wailuku, LLC, as we understand the great need for housing which faces the Maui community. At the same time, though, we

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seek to accomplish this objective without government subsidy. We believe that the provision of 195 affordable rental units to those falling within the Area Median Income range of 80% to 140% will help meet the needs of Maui's workforce families.

- We have increased parking counts to provide for two (2) parking stalls per unit, as required by Maui County Code.

- The view analysis provided as **Appendix "F"** of the Draft EA seeks to ensure that view corridors to Kahului Harbor and Haleakala will be maintained. While the civil engineer has explored opportunities for over excavating to establish lower finished floor elevations, this scenario would present challenges for project site drainage, while adding overall construction costs to the project. As noted above, the project is unique as a privately funded affordable rental project (i.e., no government subsidies), and the ability to provide affordable rental units to local families in the context of constructability and cost management is an important consideration.

- We have added sidewalks along Kuikahi Drive and Waiale Road as part of project-related improvements. These sidewalks will provide connectivity to neighboring sidewalks to enable continuous use of sidewalks to access shopping, recreation and public transit facilities. The sidewalk along Kuikahi Drive will be set back from the Kuikahi Drive travelway by 10 feet, while the sidewalk along Waiale Drive will be set back from the Waiale Drive travelway by 9 feet to 15 feet

- We recognize that the number of vehicles per household may vary. However, as an affordable apartment rental project with 27 studio units and 108 one (1) bedroom units, the maximum average number of vehicles we anticipate per household is two (2).

- With respect to trip generation during the morning peak hour, the Traffic Impact Analysis Report (TIAR) utilizes the Trip Generation Manual, 10th Edition to estimate trip generation. The morning peak hour trips estimated by the TIAR, as cited on page 27 of the report, is 139 vehicles (36 entering and 103 exiting).

- Waiale Road will be widened along a portion of the project's frontage to provide for a 12-foot travelway in both directions, as well as a 6-foot bike lane. Adjacent to the bike lane, a grassed drainage swale will be provided, as well as the 6-foot sidewalk beyond.

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- We appreciate comments provided by our neighboring communities and look forward to continuing dialogue on the various matters raised by the Waikapu Community Association through the Section 201H approval process.

- With respect to the preparation of a Chapter 343, HRS, Environmental Impact Statement (EIS), the project's technical characteristics and related impact considerations were thoroughly evaluated. In accordance with Hawaii Administrative Rules, Section 11-200-12, Significance Criteria, every phase of the 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 were considered. The analysis contained in the Draft EA was supported through in-depth technical studies that were prepared by qualified professionals, and which were then reviewed by agencies having jurisdiction and expertise in their respective fields of authority. Each section of the Draft EA included a discussion and analysis of the impacts related to the respective environmental, infrastructural, public service and socio-economic parameters. The assessment of each significance criteria set forth in Section 11-200-12 is included as Chapter X of the Draft EA. This chapter will be carried forward to the Final EA. With this in mind, we are looking forward to the conclusion of the Chapter 343, HRS process through the Hawaii Housing Finance and Development Corporation's issuance of a Finding of No Significant Impact or FONSI.

Thank you again for commenting on the Draft EA. A copy of your email and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me at email lindaschatz@schatzcollaborative.com or at telephone (808) 428-8717.

Sincerely,

Linda Schatz

LS:
cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Ben Lee, Clifford Planning & Architecture
Darren Unemori, Warren S. Unemori Engineering, Inc.
Erin Mukai, Munekiyo Hiraga
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May 15, 2018

Colleen Suyama, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

RE: Wailuku Apartment Rental Housing Project - Request for Comment

Dear Ms. Suyama:

The Waikapu Gardens Homeowners Association appreciates this opportunity to give feedback on the Draft Environmental Assessment for the proposed Wailuku Apartment Rental Housing Project by Legacy Wailuku, LLC.

After review of the updated Draft Environmental Assessment, we would like to submit the following comments for review and consideration.

1. **Location:**
   As mentioned in our previous response, this project is located at the corner of a very busy intersection and will add a dense population of residents to an already congested and busy junction. This will create problems for residents living at this proposed project as well as for residents who live in the nearby communities of Waikapu, Wailuku and Kahului, who use this area as a commuter route.

2. **Traffic:**
   This continues to be one of the major concerns regarding the location of this project. The project is being proposed at the intersections of Kuikahi Drive, Maui Lani Parkway and Waiale Road. This intersection is gridlocked with traffic during the peak morning hours from about 7.30 am to 8:00 am. with commuters dropping their children off at school and going to work. Traffic is backed up on all of these streets. Again, adding another 324 housing units will add more congestion to this intersection creating a potentially dangerous situation.

3. **Sidewalks and pedestrian parking:**
   At the 3/12/18 meeting of the Waikapu Community Association, a representative from the project mentioned having "at grade sidewalks" on Waiale Road fronting the project. Considering the residents that will be living at this project and the proximity to nearby shopping, schools and recreational facilities, it would be highly recommended to install concrete curbed sidewalks on Waiale Road which will provide a safer path route for pedestrians.

Taking the above into consideration, we would suggest scaling back the project to 9 "two story" buildings. This will help lessen the density of population at the proposed site, provide affordable rentals, and help save the corridor views in that area; which is in line with the statement of values for our Waikapu Community Association.

Thank you for allowing us this opportunity to provide feedback on the Wailuku Apartment Rental project.

Sincerely,
Waikapu Gardens Homeowners Association
P.O. Box 2390
Wailuku, HI 96793

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June 28, 2018

Waikapu Gardens Homeowners Association
P.O. Box 2390
Wailuku, Hawai'i 96793

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2) 3-5-001:064

Dear Sir or Madam:

Thank you for your letter of May 15, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We have summarized your comments and offer responses to your concerns relating to project location, traffic, sidewalks and pedestrian parking.

Comment Regarding Location:

As mentioned in our previous response, this project is located at the corner of a very busy intersection and will add a dense population of residents to an already congested and busy junction. This will create problems for residents living at this proposed project as well as for residents who live in the nearby communities of Waikapu, Wailuku and Kahului, who use this area as a commuter route.

Response:

We believe that the value of this location for affordable housing is its proximity to existing infrastructure and services (e.g., bus service, educational and recreational facilities, shopping areas, etc.). An intentional strategy to relieve congestion is to develop in proximity to existing infrastructure and services. This creates compact developments that provide families the opportunity to walk to these services without having to use their cars. From a project development standpoint, the location is highly supportive of the affordability objectives of the project. This is a key consideration to the community's success in providing workforce housing for local residents. The site is also located within the Urban Growth Boundary of the County's Maui Island Plan (MIP). The MIP, which was developed by the County of Maui with the input of the community, provides direction for future growth on the island and identifies areas deemed appropriate for future urbanization. With respect to the proposed project, we anticipate that many of the project's prospective tenants will be local families who support our community in various career fields, and who need housing in a tight residential market which has seen rental and sales price levels exceed the reach of so many.

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Comment Regarding Traffic:

This continues to be one of the major concerns regarding the location of this project. The project is being proposed at the intersections of Kuikahi Drive, Maui Lani Parkway and Waiale Road. This intersection is gridlocked with traffic during the peak morning hours from about 7.30 am to 8:00 am. with commuters dropping their children off at school and going to work. Traffic is backed up on all of these streets. Again, adding another 324 housing units will add more congestion to this intersection creating a potentially dangerous situation.

Response:

We share your concerns regarding traffic and have studied the issue thoroughly to consider all elements of mitigation which will ensure that the safety and convenience of the traveling public, including project residents, are not adversely affected. The project's Traffic Impact Analysis Report (TIAR) (**Appendix "H"** of the Draft EA) has evaluated conditions during both morning and afternoon peak hours. The TIAR identifies the northbound traffic congestion which occurs along Waiale Road for about a 30-minute period, that can back up from Kaohu Street to Kuikahi Drive during the morning peak hour of traffic. Traffic generally flows well during the remaining off-peak periods of the day. Intersection improvements have been identified and planned for by the County at the Waiale Road/Waiinu Road intersection, however this improvement is currently on hold due to various constraints. Our TIAR identifies additional regional mitigation measures along Waiale Road that will be discussed with the County for future planning purposes and could include modified traffic control options at the Waiale Road/Kaohu Street 4-way stop intersection and median refuge lanes along Waiale Road to help side street vehicles get onto Waiale Road during congested times. Other project-related roadway improvements as identified in the TIAR and the project's Preliminary Engineering Report will be implemented to support traffic flow to the maximum extent practicable. We also note that the proposed project may provide new housing opportunities for some of the families that may have students in the nearby school or for those working nearby in Wailuku. This provides an option for some of those driving commuters to move to the new project and more easily travel to work and/or school without necessarily having to drive due to the close proximity of the project to school and work. Bus, bike, and walk options may become more viable.

Please be assured that we will be a strong and supportive voice in working with nearby communities and State and County agencies to advance regional traffic solutions which will benefit the entire community.

Comment Regarding Sidewalks and Pedestrian Parking:

At the 3/12/18 meeting of the Waikapu Community Association, a representative from the project mentioned having "at grade sidewalks" on Waiale Road fronting the project. Considering the

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residents that will be living at this project and the proximity to nearby shopping, schools and recreational facilities, it would be highly recommended to install concrete curbed sidewalks on Waiale Road which will provide a safer path route for pedestrians.

Response:

Safe pedestrian routes to nearby schools and business is a shared concern. Keeping the location of the project in mind, we will be constructing paved sidewalks with asphalt curbing and bike lanes along both Waiale Road and Kuikahi Drive to ensure that safe, all-weather pedestrian routes exist between the apartment complex and the nearby Pu'u Kukui Elementary School; Kehalani Village Center shopping area; Walgreens drug store; the County bus stop in front of Ka Hale A Ke Ola; and businesses in the Maui Lani Village Center. See attached **Exhibit "A"**.

We are proposing to take the more environmentally responsible approach of using grassed swales, rather than concrete gutters, to collect pavement runoff. Importantly, this "green street" configuration will offer greater horizontal separation between the sidewalk and the vehicle travelway. Along Kuikahi Drive there will be a 10-ft. horizontal separation between the travelway and the concrete sidewalk. Along Waiale Road, there will be a 9-ft. to 15-ft. horizontal separation. We believe that this horizontal separation combined with the limited speed limits on Kuikahi Drive and Waiale Road will provide for the safety of both project and community residents.

We note that the sidewalk will be of either concrete or asphaltic construction. Our engineer has determined that either paving material will perform reliably as a sidewalk and provide the safe, all-weather, ADA compliant walking surface that will support the community's walkability objectives.

Comment Regarding Scaling Back the Project:

Taking the above into consideration, we would suggest scaling back the project to 9 "two story" buildings. This will help lessen the density of population at the proposed site, provide affordable rentals, and help save the corridor views in that area; which is line with the statement of values for our Waikapu Community Association."

Response:

The Central Maui Rental Market Study completed for the project notes the need for more affordable rental units and acknowledges that the rental demand will be from local workforce families. The proposed Wailuku Apartment Rental Housing Project is not a large scale master planned community, but a 324-unit project with a distribution of 60 percent affordable and 40 percent market. Scaling back the project and reducing the number of units by limiting the project

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to nine (9) two-story buildings would make this privately funded project infeasible.

Thank you again for providing comments on the Draft Environmental Assessment (EA). A copy of your comment letter and this response letter will be included in the Final EA.

Should you have any questions regarding our responses, please feel free to contact me by email at lindaschatz@schatzcollaborative.com or by phone at (808) 428-8717.

Sincerely,

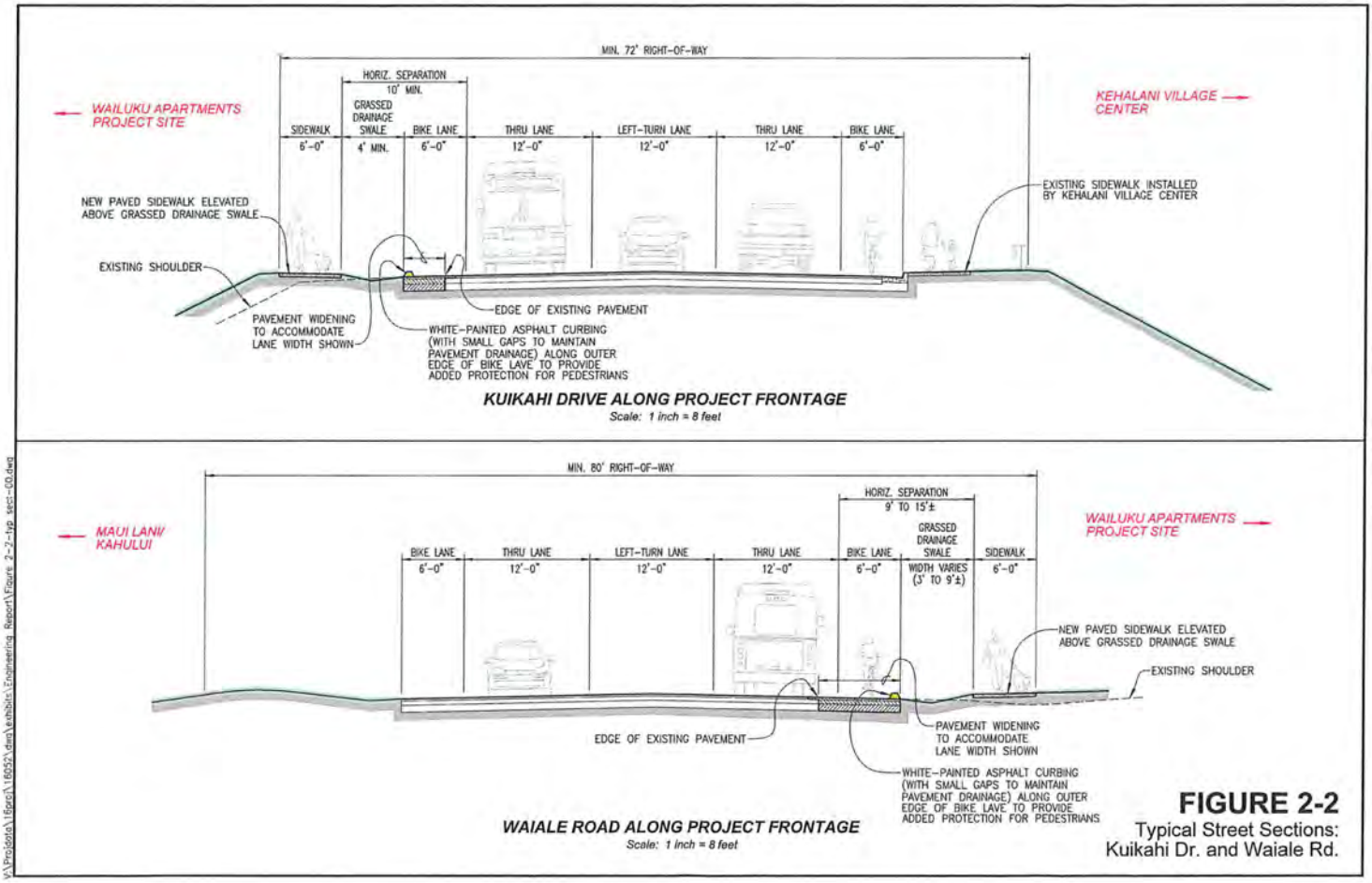
Linda Schatz

LS:
cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Darren Unemori, Warren S. Unemori Engineering, Inc.
Erin Mukai, Munekiyo Hiraga
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EXHIBIT A.

Typical Street Sections, Kuikahi Drive and Waiale Road



V:\Projects\16proj\16052\dwg\exhibits\Engineering Report\Figure 2-2-typ sect-00.dwg

FIGURE 2-2
Typical Street Sections:
Kuikahi Dr. and Waiale Rd.



MAY 17 2018

Date

Ms. Colleen Suyama
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Re: Wailuku Heights Extension - Unit II Homeowners Association ("HOA") Comments On Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key (2)3-5-001:64

Dear Ms. Suyama,

Wailuku Heights Extension - Unit II Homeowners Association ("HOA") is concerned about the traffic impact that would be caused by the proposed Wailuku Apartment Rental Housing Project at Tax Map Key (2)3-5-001:64 ("Project").

The HOA believes the solution for relieving Project caused traffic congestion proposed by the traffic study in the draft Environmental Assessment ("Draft EA") is inadequate. The traffic study authored by Austin Tsutsumi & Associates states that traffic will continue to operate at "over-capacity" and that traffic will "worsen" along the major roads in the area. The suggested method of relieving traffic congestion is to "encourage transportation demand management measures, such as programs that promote the use of transit, walking, biking, and alternative modes of transportation...". The HOA thinks this solution is inadequate and impractical.

While promoting alternative transportation is an admirable proposal, the HOA believes it would be more meaningful to require the Project, and other projects, to make a monetary contribution towards the maintenance and improvement of the County and State road infrastructure. The Draft EA study acknowledges portions of the County and State infrastructure are already "over-capacity". Adding a concentration of over 600 cars can only cause additional overload. Just as Maui Lani has been required to contribute $610,000 towards the Maui Lani-Kamemeha intersection, the HOA suggests that one condition of approving the Project is to assess a charge to this and future developments in order help share the financial burden of improving our inadequate road infrastructure.

Sincerely,

Wailuku Heights Extension – Unit II Homeowners Association
Board of Directors

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June 28, 2018
Wailuku Heights Extension Unit II Homeowners Association
Board of Directors
c/o Hawaiiana Management Company, Ltd.
140 Hoohana Street, Suite 208
Kahului, Hawai'i 96732

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2) 3-5-001:064

Dear Sir or Madam:

Thank you for your letter received on May 17, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We have restated your comments below and offer responses to your concerns relating to traffic.

Comment No. 1:

The HOA believes the solution for relieving Project caused traffic congestion proposed by the traffic study in the draft Environmental Assessment ("Draft EA") is inadequate. The traffic study authored by Austin Tsutsumi & Associates states that traffic will continue to operate at "over-capacity" and that traffic will "worsen" along the major roads in the area. The suggested method of relieving traffic congestion is to "encourage transportation demand management measures, such as programs that promote the use of transit, walking, biking, and alternative modes of transportation ...". The HOA thinks this solution is inadequate and impractical.

Response:

The Traffic Impact Analysis Report (TIAR), presented as **Appendix "H"** of the Draft Environmental Assessment (EA), acknowledges specific traffic congestion issues with specific movements at the Honoapi'ilani Highway/Kehalani Parkway intersection, Kuikahi Drive/Kehalani Village Center Driveway intersection, Waiale Road/Waiinu Road intersection and the Kaohu Street/Waiale Road intersection. These conditions will continue with or without the project. In this regard, we agree that transportation management may be one possible partial solution, but is not considered adequate to fully address the existing traffic problems in the project vicinity. See additional response below.

Comment No. 2:

While promoting alternative transportation is an admirable proposal, the HOA believes it would be more meaningful to require the Project, and other projects, to make a monetary contribution towards the maintenance and improvement of the County and State road infrastructure. The Draft EA study acknowledges portions of the County and State infrastructure are already "over-

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capacity". Adding a concentration of over 600 cars can only cause additional overload. Just as Maui Lani has been required to contribute $610,000 towards the Maui Lani-Kamemeha intersection, the HOA suggests that one condition of approving the Project is to assess a charge to this and future developments in order help share the financial burden of improving our inadequate road infrastructure.

Response:

The project's TIAR has identified specific roadway and related traffic improvements to be made by Legacy Wailuku LLC. See Page 43, of the TIAR.

The TIAR also evaluated congestion conditions during both morning and afternoon peak hours. Issues which are of specific concern as it relates to the proposed Wailuku Apartment Rental Housing Project include the northbound traffic congestion that occurs along Waiale Road for about a 30 minute period, that can back up from Kaohu Street to Kuikahi Drive during the morning peak hour of traffic. Traffic generally flows well during the remaining off-peak periods of the day. Intersection improvements have been identified and planned for by the County at the Waiale Road/Waiinu Road intersection, however this improvement is currently on hold due to various constraints. The TIAR identifies additional regional mitigation measures along Waiale Road that will be discussed with the County for future planning purposes and could include modified traffic control options at the Waiale Road/Kaohu Street 4-way stop intersection and median refuge lanes along Waiale Road to help side street vehicles to get onto Waiale Road during congested times.

Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help implement the regional traffic improvements cited above. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income.

We look forward to continuing dialogue on traffic matters through the Section 201H approval process, and therefore appreciate receiving your comments. A copy of your letter and this response letter will be included in the Final EA.

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Should you have any questions regarding our responses, please feel free to contact me by email at lindaschatz@schatzcollaborative.com or by phone at (808) 428-8717.

Sincerely,

Linda Schatz

LS:
cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Erin Mukai, Munekiyo Hiraga
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To: **Mr. Ken Takahashi,** (808) 587-0547, ken.t.takahashi@hawaii.gov
Hawai'i Housing Finance Development Corporation (HHFDC)
677 Queen Street, Room 300, Honolulu, HI 96813
To: **Mr. Michael Munekiyo**, AICP, (808) 244-2015, planning@munekiyohiraga.com
Munekiyo Hiraga; 305 High Street, Suite 104, Wailuku, Hawaii 96793
To: **Ms. Linda Schatz** (808) 428-8717 lindaschatz@schatzcollaboratve.com
Legacy Wailuku, LLC; 114 Olomana Lane, Honolulu, Hawaii 96813
To: **Mr. Vince Bagoyo** 808-357-3842 vbagoyo-devgroup@hawaii.rr.com
V. Bagoyo Development Consulting Group, LLC 1500 Kilinoe Pl., Wailuku, HI 96793

From: Richard "Dick" Mayer dickmayer@earthlink.net
1111 Lower Kimo Dr. Kula, Maui HI 96790

May 8, 2018

RE: REVISED Wailuku Apartment Rental Housing Project DEA (AFNSI)

Since much of the material in this revised draft EA is similar to the original draft EA, and because the response comments by Bagoyo Development Consulting Group did not adequately respond to my original comments, I am having to resubmit parts of my original October-2017 letter with some supplementary material.

Fortunately, in several respects this revised EA has improved upon the original DEA document. I will try to cite those areas which have been improved.

SUMMARY Multiple affordable housing projects are needed on Maui, ones that will meet our local residents' housing needs. HOWEVER, this project includes:
- too many market units resulting in a very crowded project with undesirable impacts;
- far too many 201-h exemptions that will cost the community dearly; and
- several severe impacts (some disclosed and others not described) that

➔ **NECESSITATE A COMPLETE EIS, (not just an EA with a FONSI).**

In view of the impacts and information deficiencies noted in the existing DEA, and the fact that the impacts of the project are significant, as defined by HAR 11-200-12, (See Appendix A below) an Environmental Impact Statement is required instead of an Environmental Assessment.
Specifically, the DEA does not adequately address:

- **Cumulative impacts of traffic from new developments and roads**
- **Cumulative impacts on over-capacity schools**
- **Secondary impacts on other developments resulting from this project's water use**
- **Cumulative impacts on Central Maui's sewage capacity**
- **Cumulative impacts by housing off-shore residents instead of providing for local residents' needs**

Specific comments on the Wailuku Apartment Rental Housing Project D-EA (AFNSI):

1. **Full EIS**: This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do

exist, a full Environmental Impact Statement (EIS) should be required by the Hawai'i Housing Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project. **A "Full EIS" is needed and should be required to examine the many significant cumulative and secondary impacts and how they will be mitigated.**

2. **Implementation**: This REVISED Housing Project DEA mentions numerous impacts (intersections at "F levels", schools already beyond capacity, distance from parks with no safe routes, distant bus stops, etc.) indicates some possible mitigating solutions, **but does not promise to implement the needed mitigations.**

3. **Exemptions**: As stated on Draft-EA Page 5, the Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes.

The document includes an absurdly high number of major exemptions (18 pages listed on D-EA pages 208-213, and in more detail on PDF Pages 1147-1158) that are being requested. The very fact that these 18 pages of exemptions (the most we have yet to see) are included may be a hint that there are numerous significant impacts that the applicant wishes to not disclose. **Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, etc. MUST be discussed and mitigated. They are not.**

4. **Traffic**: The Draft-EA's major omissions relate to traffic (PDF 55-73 + Appendix H).

4.A The Draft-EA TIAR traffic analysis has selectively underestimated the future impacts from several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center.

Both of these projects have already received initial entitlements, and it is likely that they will soon be impacting this 201-h affordable apartment project's traffic in a very significant manner. Similarly, this Wailuku Apartment Rental Housing will be impacting the traffic of those projects. **A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts.** Those other projects in their full EIS have already-approved environmental documents with comprehensive TIAR information, but they did not include this Wailuku Apartment Rental Housing in their TIAR analysis.

4.B In addition to not completely considering the planned growth of nearby projects, the DEA has not considered the effects of new highways that will affect the flows of traffic. For example, if the Waiale Road is extended southward to Honopiilani Hwy. there will be a great increase on all of the intersections on Waiale Road, especially those near this project. (See PDF 933:

The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, since they are unlikely to be built

by Year 2021 given their current status, **these roadway improvements were not included in this TIAR.**

They should have been included, and a full EIS would discuss these projects.

Since there is a total potential of: {Waikapu (1,440) +adjacent Waiale Road projects (146) + A&B Waiale (2,550) + Maui Lani (935) + Kehalani (956) + this Wailuku Apt. project (324)} **= 6,351 units in this already congested area,** the cumulative future traffic being generated from these five nearby projects could significantly affect the already very limited roads in the area, I request that the HHFDC and the Maui Planning Organization (MPO) require:

i) that, along with the other developers, Wailuku Apartment Rental Housing Project be **required to provide a "fair share" of the cost of: a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems**; and

ii) that, along with the other major developments, Wailuku Apartment Rental Housing project be **required to pay its "fair share" to upgrade the highways, roads and intersections in this area**.

4.C Even though this project will not be completed until 2021, the TIAR has used 2021 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

5. **Housing Unit Numbers**: Draft-EA Page 16: Although this project is being described as a 201-h affordable housing rental project, in fact **only 110 out of 324 units (only 34% of the units) are for those under 100% of Maui's median income (the AMI)**. In other words, 214 units (the vast majority) are for those **over** the median Maui family income, either as 190 market units or 24 higher rent affordables.

This is hardly an affordable housing project if over half the people in Maui would be unable to afford to even rent a unit in the project. A condition should we put on this project to require at least half of all the units to be available to those who are earning less than 100% of the average family income.

With regard to the number of available units, and especially the number of available affordable units, there are inconsistencies in the Draft-EA.
For example: It clearly states on PDF page 25 that the affordable units will be rented out only to those between 80% and 140%. However, on the immediately preceding page in table 2 it indicates that there will be 55 units rented out to those between 51 to 80%. So what is the commitment?

Another example: throughout the draft EA it is stated that they will be 324 total units. However, in the table on PDF page 906, a total of 301 units is used.

6. **Off-Shore Residents:** Why is this project counting on demand from off-shore residents when there is such a great need for local residents.
See pages Draft-EA PDF page 881 for discussion of this.

> "The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to **offshore demand** in a significant way - significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a **3-month lease period** is important, as that can take advantage of seasonal demand - meaning the winter and the summer 'high' periods."

And on Draft-EA PDF page 885:

> "**A good part of the demand for these units - especially studios, we believe - would be from offshore renters coming into the market to enjoy a 3-4 month stay** - using these units as a substitute for hotel rooms."

And on Draft-EA PDF page 900:

> "We expect that Maui's visitor industry will continue to enjoy success and thereby **cultivate amongst a portion of the shortterm visitors a desire to lengthen their stay the following trip by renting a unit for 3 months, the minimum period for this project.** We expect the demand here coming out of Canada and the northern states of the US."

And on Draft-EA PDF page 901:

> "We see all sources of demand being present and accounted for . . . Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility. **We suggest there be a healthy mix, as the local presence will make project more attractive to the offshore rental demand**."
> the US."

And on Draft-EA PDF page 905:

> **There will be additional demand from offshore renters.** It may be likely that **offshore demand might even be as high as a quarter or a third of the units**. A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that **there is an apparent offshore demand for these types of units**.

And finally on Draft-EA PDF page 906:

> PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bed room unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bed room unit, as that has the deepest demographic, as an affordable unit. **Plus, we expect very good offshore demand for a small unit, such as this.**
>
> Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families. **We also see a**

good potential demand for renting them out on the minimum lease of 3 months to offshore visitors, grandparents who will cycle their grandchildren through the unit over the summer or winter months.

7. **Population**: The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. **In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.**

8. **Schools** which will service the Wailuku Apartment Rental Housing Project's many families, are all significantly **over capacity NOW**.

> **"Pu'u Kukui Elementary School** is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years. **Maui Waena Intermediate School** is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years. **Maui High School** is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years." (Draft-EA PDF page 53)

The small school impact fee to be paid to the State (far less than $1 million) will not begin to satisfy the DOE's ability to build the additional classrooms or improve the schools' capacities. South Maui cannot even gets its high school built.

9. **Finances**: Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Apartment Rental Housing project. They have already received several entitlements without trying to get any 201-h exemptions.

10. **Play Areas and Parks**: The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great.
Among the 1,000 residents there will be many toddlers who will be able to use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). The greater impact will fall on the 100+ children of school age. These children will need to get to parks and playing fields along streets lacking bicycle routes and with minimum sidewalks and by crossing several very busy and dangerous high traffic avenues.
The so called "swimming pool" appears to be merely a small wading pool, totally insufficient for 1,000 residents.

11. **Solid Waste**: The Draft-EA on page 34 mentions a private company being responsible for Solid Waste disposal. "Solid waste collection services for the project will be provided by a

privately managed company and disposed at Maui County's Central Maui Landfill." Who will be required to pay for this company? Residents in affordable units?

The Draft-EA does not show any locations for solid waste disposal / trash bins. There will be many of these for 324 units. Nor does it seem that big rubbish trucks will be able to turn around at the end of the 300'+ driveway. Backing up early in the morning will be a noisy disturbance. The response to this statement in my previous letter was incomplete and inadequate, only that the developer would look into it. However, that did not happen.

12. **Pedestrian Safety**: This revised DEA has many improved safety features for pedestrians: sidewalks on Kuikahi and a cross-walk from the project to Foodland and Longs.

Unfortunately, there is only a partial sidewalk along Waiale Road. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. To get to the nearby stores they will need a complete sidewalk along Waiale and it should be provided south of the Waiale Road exit/entrance. Because the project can gain 201-h approval only if "the proposed housing project is consistent with the purpose and intent of Section 201H-38, HRS, and **the project's design meets all health and life safety requirements per the building code and Maui County Code**."

13. **A&B's 2,550 unit Waiale project:** Maps on PDF pages 18 +35 and throughout the DEA do not show the major project to the South and to the East. The map and text should include the largest project (A&B's 2,550 unit Waiale project), the one that will have the greatest impact on the proposed Wailuku Apt project, and vice verso will be affected by the Wailuku Apt't project.

14. **Water:** The Draft-EA PDF Pages 44 + 45 and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gallons for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with sizeable affordable units)?

15. **Parking**: The original draft contained only 486 parking stalls. This DEA has over 600. How was this change made? Have all the stalls been reduced in width/size? Will there be adequate parking space for pick-ups and larger vehicles? Special visitor parking? Handicapped parking?

16. **300 foot+ driveway, cul-du-sac**: Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night with 600+ cars, will firetrucks be able to access all buildings and be able to turn around, or even safely back-up?

17. **Project Management**: Will the County ever have any responsibilities if Legacy goes out of business? (Repairs? Ownership? Management? Utilities? Insurance? etc.)
Who will manage the property? Establish homeowner association fees?
The impacts have yet to be discussed.

18. **Long-Term:** After the 30 years what will happen? Will renters ever have the right to purchase? Will rents suddenly rise?

SUMMARY Multiple affordable housing projects are needed on Maui, ones that will meet our local residents' housing needs. HOWEVER, this project includes:
-- too many market units resulting in a very crowded project with many impacts;
-- far too many 201-h exemptions that will cost the community dearly; and
-- several severe impacts (some disclosed and others not described) that necessitate a complete EIS, (not just an EA with a FONSI).

WARNING: Because there are so many actual impacts from this proposed project, it is likely that someone will sue the applicant and/or approving authority if the FONSI is granted and a full EIS is not required.

Mahalo for allowing me the opportunity to share my comments on the Draft-EA and to make my concerns known,

Richard D. Mayer

CC Maui County Councilmember Stacey Crivello, Chair, Housing Committee
Maui County Councilmember Kelly King, Chair, Planning Committee
Maui County Councilmember Alika Atay, Wailuku Residency Councilmember
Director Carl Reimann, Maui County Housing and Human Affairs Department
Director Will Spence, Maui County Planning Department

Appendix A

HAR §11-200-12 Significance criteria.

(a) In considering the significance of potential environmental effects, agencies shall consider the sum of effects on the quality of the environment, and **shall evaluate the overall and cumulative effects** of an action.

(b) 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**. In most instances, an action shall be determined to have a significant effect on the environment if it:

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;
2. Curtails the range of beneficial uses of the environment;
3. Conflicts with the state's long-term environmental policies, or goals, or/and guidelines as expressed in chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;
4. Substantially affects the economic welfare, or social welfare, and cultural practices of the community or State;
5. Substantially affects public health;
6. Involves substantial secondary impacts, such as population changes or effects on public facilities;
7. Involves a substantial degradation of environmental quality;
8. Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;
9. Substantially affects a rare, threatened, or endangered species, or its habitat;
10. Detrimentally affects air or water quality or ambient noise levels;
11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;
12. Substantially affects scenic vistas and view planes identified in county or state plans or studies; or,
13. Requires substantial energy consumption.

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June 28, 2018

Richard "Dick" Mayer
1111 Lower Kimo Drive
Kula, Maui, Hawaii 96790

SUBJECT: Draft Environmental Assessment for the Proposed Wailuku Apartment Rental Housing Project at Tax Map Key No. (2)3-5-001:064

Dear Mr. Mayer:

Thank you for your letter of May 8, 2018, providing comments on the subject Chapter 343, Hawaii Revised Statutes (HRS) document. We have restated your comments in the order presented in your letter and have provided responses to each, as follows:

Comment No. 1:

Full EIS: *This project is trying to use a Draft Environmental Assessment (DEA) with an "Anticipated Finding of NO Significant Impact" (AFNSI) in hopes of getting a "Finding of NO Significant Impact" (FONSI). Since significant major and many minor impacts and problems do exist, a full Environmental Impact Statement (EIS) should be required by the Hawai'i Housing Finance Development Corporation (HHFDC) which is both the applicant and the approving authority for this project.* ***A "Full EIS" is needed and should be required to examine the many significant cumulative and secondary impacts and how they will be mitigated.***

Response:

The project's technical characteristics and related impact considerations were thoroughly evaluated by Applicant, Legacy Wailuku LLC and Approving Agency, Hawaii Housing Finance & Development Corporation (HHFDC). In accordance with Hawaii Administrative Rules (HAR), Section 11-200-12, Significance Criteria, every phase of the 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 were considered. The analysis contained in the Draft Environmental Assessment (EA) was supported through in-depth technical studies that were prepared by qualified professionals, and which were then reviewed by agencies having jurisdiction and expertise in their respective fields of authority. Each section of the Draft EA included a discussion and analysis of the impacts related to the respective environmental, infrastructural, public service and socio-economic parameters. The assessment of each significance criteria set forth in Section 11-200-12, HAR is included as Chapter X of the Draft EA. This chapter will be carried forward to the Final EA. The need for a full Environmental Impact Statement (EIS) is not deemed warranted in the context of the level of impacts, analysis and mitigation measures documented in the Draft EA.

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***Comment No. 2*:**

Implementation: *This REVISED Housing Project DEA mentions numerous impacts (intersections at "F levels", schools already beyond capacity, distance from parks with no safe routes, distant bus stops, etc.) indicates some possible mitigating solutions,* ***but does not promise to implement the needed mitigations.***

***Response*:**

Where mitigation measures are required due to potential impacts attributed to the project, Legacy Wailuku LLC will implement those applicable measures, including measures to address impacts related to traffic, access to recreational facilities and access to bus stops. As a disclosure document, the Draft EA has allowed agencies to comment on the identified mitigation measures. If more specific mitigation measures are raised by agencies as project development advances, Legacy Wailuku LLC will continue dialogue with the applicable agencies to define how such measures can be addressed as part of the project engineering and design phases of work. As a Section 201H project, the HHFDC and the Maui County Council will be engaged in the process of ensuring that conditions or modifications requested of the applicant are complied with. In summary, Legacy Wailuku LLC seeks to be transparent in the 201H process to ensure that mitigation solutions are appropriately implemented.

Comment No. 3:

Exemptions: *As stated on Draft-EA Page 5, the Applicant, in coordination with the HHFDC, will seek exemptions from certain statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of dwelling units thereon as provided by Section 201H-38, Hawaii Revised Statutes.*

The document includes an absurdly high number of major exemptions (18 pages listed on D-EA pages 208-213, and in more detail on PDF Pages 1147-1158) that are being requested. The very fact that these 18 pages of exemptions (the most we have yet to see) are included may be a hint that there are numerous significant impacts that the applicant wishes to not disclose. ***Although numerous exemptions are being requested, the impacts from the exempted statutes, ordinances, charter provisions, and rules relating to planning, zoning, construction standards for subdivisions, etc. MUST be discussed and mitigated. They are not.***

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Response:

Legacy Wailuku LLC has recently undergone a vetting process for the requested exemptions with County agencies having jurisdiction over the applicable provisions of the Maui County Code. As a result, the list of exemptions is being revised, reduced, and streamlined to ensure that only those exemptions necessary to advance affordability while maintaining public health and safety, are proposed through the Section 201H process. The revised list of exemptions will be included in the Final EA and are not outside of the realm of what has been asked for in the past by other 201H projects. The lengthy number of pages represents Legacy Wailuku LLC's dedication to transparency and thoroughness in explaining the value, rationale, and specific purpose for the project. This thoroughness in explanation creates a lengthy document but the number of exemptions remains in line with other 201H projects that have been approved in the past by the Maui County Council. The final list of exemptions will be considered by the HHFDC and the Maui County Council in their respective decision-making processes for the 201H application.

Comment No. 4:

Traffic: *The Draft-EA's major omissions relate to traffic (PDF 55-73 +Appendix H).*

Comment No. 4A:

The Draft-EA TIAR traffic analysis has selectively underestimated the future impacts from several large, well-known, nearby housing and commercial developments. Specifically: A&B's 545 acre, already partially completely entitled 2,550 unit Waiale project; and the nearby, partially entitled, 1,450 unit Waikapu Town Center.

Both of these projects have already received initial entitlements, and it is likely that they will soon be impacting this 201-h affordable apartment project's traffic in a very significant manner. Similarly, this Wailuku Apartment Rental Housing will be impacting the traffic of those projects. ***A full EIS with a proper TIAR is needed to evaluate and mitigate these cumulative impacts.*** *Those other projects in their full EIS have already-approved environmental documents with comprehensive TIAR information, but they did not include this Wailuku Apartment Rental Housing in their TIAR analysis.*

Response:

The Traffic Impact Assessment Report (TIAR) recognizes that the initial phase of the Waikapu Country Town project may be implemented by the Wailuku Apartment Rental Housing Project's 2021 base year. The TIAR also assumes that A&B's Waiale Project is unlikely to have units constructed by the base year. These assumptions, together with the accounting of ambient growth in the overall Wailuku region, were based on the traffic engineer's knowledge of local development conditions and the progress of specific proposed actions. The technical basis for and analysis of traffic impacts documented in the TIAR have been reviewed by the State Department

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of Transportation and the County Department of Public Works. The TIAR is considered to meet the traffic engineering reporting standards and quality control criteria.

Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help implement the regional traffic improvements cited in the TIAR. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income.

In summary, we believe that the project's TIAR appropriately addresses technical methodology requirements for analysis of project-related traffic impacts.

Comment No. 4B:

In addition to not completely considering the planned growth of nearby projects, the DEA has not considered the effects of new highways that will affect the flows of traffic. For example, if the Waiale Road is extended southward to Honopiilani Hwy. there will be a great increase on all of the intersections on Waiale Road, especially those near this project. (See PDF 933:
The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, *since they are unlikely to be built by Year 2021 given their current status,* ***these roadway improvements were not included in this TIAR. They should have been included, and a full EIS would discuss these projects.***

Since there is a total potential of: {Waikapu (1,440) +adjacent Waiale Road projects (146) + A&B Waiale (2,550) + Maui Lani (935) + Kehalani (956) + this Wailuku Apt. project (324)}
= ***6,351 units in this already congested area,*** *the cumulative future traffic being generated from these five nearby projects could significantly affect the already very limited roads in the area, I request that the HHFDC and the Maui Planning Organization (MPO) require:*

i) that, along with the other developers, Wailuku Apartment Rental Housing Project be ***required to provide a "fair share" of the cost of: a comprehensive traffic study of the Central Maui region which will examine the cumulative effects/impacts from all the projects and indicate the necessary costs to mitigate regional traffic problems****;*
and

ii) that, along with the other major developments, Wailuku Apartment Rental Housing project be ***required to pay its "fair share" to upgrade the highways, roads and intersections in this area****.*

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Response:

The TIAR, which was updated in May 2018, recognizes that both the Waiale Road Extension and improvements to Waiko Road are planned improvements, but are not anticipated to be completed before the base year of 2021.The Chapter 343, HRS process for those projects will address their respective impacts prior to their implementation. With the potential changes in traffic volumes on Waiale Road as a result of these projects, the consideration of regional mitigation measures cited in the TIAR would appear to be appropriate complementary actions which can be implemented.

As noted above, Legacy Wailuku LLC is generally supportive of governmental efforts to create a reasonable nexus-based traffic impact fee system which can be equitably applied to all developments, and which will help fund either comprehensive traffic studies or implement the regional traffic improvements cited in the TIAR. However, at the same time, Legacy Wailuku LLC's position is unique from other larger scale master planned development projects, as we seek to target housing needs for local families who meet the lower thresholds of the island's area median income. As with other impact fees which may affect affordability, we support exemptions to impact fees which may adversely affect the ability to provide affordable housing to local residents.

Comment No. 4C:

Even though this project will not be completed until 2021, the TIAR has used 2021 as its "Base Year." Furthermore, it has avoided looking clearly at the cumulative traffic impacts from the nearby projects that will soon be built and which will greatly impact all the intersections described in the TIAR.

Response:

The TIAR considered trip generation from other projects having reasonable probability of being completed by the Base Year of 2021. The study is based on current traffic engineering methodology and assumptions are considered reasonable and appropriate. Importantly, the TIAR recognizes regional improvements which may address existing peak hour congestion issues. Such regional improvement needs are best addressed through a comprehensive traffic impact fee system which can be equitably applied to projects without adversely affecting the equally important goal of providing affordable housing to local working families.

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Comment No. 5:

Housing Unit Numbers: *Draft-EA Page 16: Although this project is being described as a 201-h affordable housing rental project, in fact* ***only 110 out of 324 units (only 34% of the units) are for those under 100% of Maui's median income (the AMI).*** *In other words, 214 units (the vast majority) are for those* ***over*** *the median Maui family income, either as 190 market units or 24 higher rent affordables.*

This is hardly an affordable housing project if over half the people in Maui would be unable to afford to even rent a unit in the project. A condition should we put on this project to require at least half of all the units to be available to those who are earning less than 100% of the average family income.

With regard to the number of available units, and especially the number of available affordable units, there are inconsistencies in the Draft-EA. For example: It clearly states on PDF page 25 that the affordable units will be rented out only to those between 80% and 140%. However, on the immediately preceding page in table 2 it indicates that there will be 55 units rented out to those between 51 to 80%. So what is the commitment?

Another example: throughout the draft EA it is stated that they will be 324 total units. However, in the table on PDF page 906, a total of 301 units is used.

Response:

This project falls within the affordability purview of the HHFDC which states, "The HHFDC establishes its affordability threshold for projects as those projects that primarily are affordable to households with incomes at or below 140% of the area median income.[1]" Maui County Code Chapter 2.96 also requires an income group distribution for the affordable units to be one-third very low- and low-income (50-80%AMI), one-third at below-moderate income at 80-100%AMI, and one-third at moderate income at 100-120%AMI. Affordability definition according to HUD is based on housing costs (either owned or rented) that is no more than 30% of a household's income. Our project will produce units following HHFDC's affordable rental guidelines as noted in **Table 2** of our EA with a unit distribution following Maui County's Chapter 2.96 requirements.

[1] HHFDC 201H Application, http://dbedt.hawaii.gov/hhfdc/201h-development-assistance/, page 1

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Table 2. HHFDC Maui Affordable Rental Guidelines, Distribution of Units by Income Category and Rental Ranges

Area Median Income Level	Income Group	Number of Units	Rental Range*	Percentage of Units
51–80%	Low income	55	$627 - $1,616*	17%
81-100%	Low-moderate income	55	$1,123 - $2,107*	17%
101-120%	Low-moderate income	55	$1,453 - $2,598*	17%
121-140%	Moderate income	30	$1,783 - $3,089*	9%
Subtotal of Affordable Units		**195**		60%
N/A	Market	129	---	40%
Grand Total		**324**		**100%**

* Note: Rents are based on 2018 HHFDC Rent Guidelines minus utility allowance. These are subject to change based on annually published rent guidelines and utility allowances by State and County agencies.

The high cost of living, construction costs, and land costs create an affordability problem for a large portion of the island's population. Meeting state and county affordability requirements and allowing a mixture of market rate units help to cross-subsidize a truly mixed income community that is healthy and does not require direct government subsidies. The project, due to the unit count and mix of incomes can be privately financed. Most rental projects of this scale in Hawaii require direct county or state subsidies to be financed and yield a very small number of units to meet the demand for local housing.

Because of the lack of supply, many families with higher incomes who need to rent are competing with families that are at lower incomes, absorbing the existing housing stock. With the introduction of this project, we provide new units that families earning over 100% AMI can also afford, thereby freeing up older housing stock for families that need low- to low-moderate rental units. Accordingly, the ripple effect in the marketplace goes beyond just what this project has to offer.

Regarding our commitments to income levels, Legacy Wailuku LLC will be offering 17% of rental units that will have rent ranges from 51%-80% AMI; 17% of the units will have rents ranging from 81%-100%AMI, and so forth.

With regard to inconsistencies in unit counts cited on page 906 of the Central Maui Rental Market Study and the final count of 324 units reflected in Chapter I of the EA, we note that the market study was done in advance of more detailed design and site planning work, and the 301 unit count was a preliminary estimate used to inform project programming parameters. The unit count of 324 is the correct number based on the detailed architectural studies subsequently performed. Studies relating to engineering and traffic which require greater specificity in unit count numbers, based their work on 324 units.

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Comment No. 6:

Off-Shore Residents: *Why is this project counting on demand from off-shore residents when there is such a great need for local residents.*
See pages Draft-EA PDF page 881 for discussion of this.
"The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to ***offshore demand*** *in a significant way - significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a* ***3-month lease period*** *is important, as that can take advantage of seasonal demand - meaning the winter and the summer 'high' periods."*
And on Draft-EA PDF page 885:

> *"****A good part of the demand for these units - especially studios, we believe - would be from offshore renters coming into the market to enjoy a 3-4 month stay*** *- using these units as a substitute for hotel rooms."*
> *And on Draft-EA PDF page 900:*
> *"We expect that Maui's visitor industry will continue to enjoy success and thereby* ***cultivate amongst a portion of the shortterm visitors a desire to lengthen their stay the following trip by renting a unit for 3 months, the minimum period for this project.*** *We expect the demand here coming out of Canada and the northern states of the US."*

And on Draft-EA PDF page 901:

> *"We see all sources of demand being present and accounted for . . . Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility.* ***We suggest there be a healthy mix, as the local presence will make project more attractive to the offshore rental demand.***"
> *the US."*

And on Draft-EA PDF page 905:

> ***There will be additional demand from offshore renters.*** *It may be likely that* ***offshore demand might even be as high as a quarter or a third of the units****. A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that* ***there is an apparent offshore demand for these types of units****.*

And finally on Draft-EA PDF page 906:

> *PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bed room unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bed room unit, as that has the deepest demographic, as an affordable unit.* ***Plus, we expect very good offshore demand for a small unit, such as this.***
>
> *Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families.* ***We also see a good potential demand for renting them out on the minimum lease of 3 months to offshore visitors****. grandparents who will cycle their grandchildren through the unit over*

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the summer or winter months.

Response:

Legacy Wailuku LLC is presenting this project as a long-term rental with a 30-year deed restriction to maintain the affordability commitment. The market study considered all options prior to the design and planning of the project. The market researcher's opinions on what is highest and best use and survey of supply and demand are shared in the report. What Legacy Wailuku LLC does as a development program is an independent decision of what the market researcher notes as highest and best use.

Legacy Wailuku LLC will not utilize any unit for short-term vacation rentals. We agree that the current Maui market has a glut of short-term vacation rentals that is impacting the local long-term rental supply. All 324 units will be long-term rentals as committed to in our 201H application.

With respect to page 885 regarding short term rental studios, this is a recommendation of the market researcher studying the highest and best use for the market. It does not mean that Legacy Wailuku LLC will do this in our development program. Again, our 201H application/EA commitment is to have all 324 units utilized as long-term rentals to meet the local demand.

Similarly, Legacy Wailuku LLC is committed to the local rental market. Targeting the "offshore rental market" is not an objective of the project.

Comment No. 7:

***Population**: The Draft-EA makes numerous references to the fact that the population of Central Maui and the adjoining districts is growing rapidly and that there is a significant need for housing, and in particular affordable housing.*

However, when it comes to describing impacts on infrastructure (schools and other facilities), the Draft-EA states that there will be no impact at all because people are merely moving around. This reasoning neglects to point out that people moving into this Wailuku project may be coming from upcountry, South Maui, even Honolulu or the mainland. ***In each case infrastructure (water, waste water, schools, will be "impacted" and should not be ignored.***

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Response:

The Draft EA, through the Central Maui Rental Market Study (Cassiday, 2017; Appendix "G"), recognizes the demographic conditions leading to the need for more affordable rental units. The study acknowledges that the rental demand will be from local workforce families. The analysis of impacts presented in the Draft EA carefully examines each impact parameter (e.g., public services, infrastructure, etc.) and presents a thorough analysis of the impacts and related mitigation measures associated with each parameter. In conducting the analysis and in preparing the technical studies which are used as a basis for analyzing key parameters (e.g., traffic, infrastructure), there are no assumptions made as to the locational origin of prospective renters, nor are there assumptions made regarding the relationship of prospective tenant's locational origins and resulting level of impacts. We agree that impacts from the project should be independently analyzed irrespective of the relocation patterns of tenants.

Comment No. 8:

Schools *which will service the Wailuku Apartment Rental Housing Project's many families, are all significantly* ***over capacity*** ***NOW****.*

> ***"Pu'u Kukui Elementary School*** *is currently over capacity by approximately 100 students and this over capacity condition is expected to remain over the next five (5) years.* ***Maui Waena Intermediate School*** *is over capacity of approximately 250 students and this over capacity condition is expected to remain over the next five (5) years.* ***Maui High School*** *is over capacity by approximately 300 students and this over capacity condition is expected to increase to approximately 400 students over the next five (5) years." (Draft-EA PDF page 53)*

The small school impact fee to be paid to the State (far less than $1 million) will not begin to satisfy the DOE's ability to build the additional classrooms or improve the schools' capacities.
South Maui cannot even gets its high school built.

Response:

Legacy Wailuku LLC recognizes the current enrollment and capacity issues facing Central Maui schools, and is willing and ready to support and comply with the mitigation protocols that have been adopted by the Department of Education. Legacy Wailuku LLC also recognizes that school capacity concerns are community-wide issues, which must be addressed in the context of broader educational facilities capital improvements planning which will ensure quality education for our next generation of children. We understand that the provision of quality education must be equitably provided to residents of new housing units, whether located at Kehalani, Maui Lani or Waikapu, and that each housing provider will comply with impact fee requirements in place at the time of project implementation.

Comment No. 9:

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***Finances**: Several nearby projects (A&B's Waiale and Waikapu Town) have many more affordable units than this Wailuku Apartment Rental Housing project. They have already received several entitlements without trying to get any 201-h exemptions.*

Response:

Legacy Wailuku LLC views the affordable housing crisis as one which requires multiple players, each able to contribute to the overall solution based on the level of expertise each is able to bring to the table. Development entities willing to help Maui's workforce families will approach the problem in ways which are unique, based on their respective long-term development objectives and housing development experience. Legacy Wailuku LLC is in a position to bring new affordable housing inventory to market in a relatively short timeframe, which is viewed as a positive outcome for the island's local families.

Both of the projects you reference also have the advantage of scale with thousands of units in their pipeline to spread costs and subsidize their affordability requirements. Their ratio of affordable to market is far less than what we are proposing. The Wailuku Apartment Rental Housing Project is not a large scale master planned community, but a 324-unit project with a distribution of 60% affordable and 40% market.

Comment No. 10:

***Play Areas and Parks:** The Wailuku Affordable Apartment project will have 324 units and approximately 1,000 residents. There will be many children in a project catering to young families who do not have the income to purchase a home. That is great.*
Among the 1,000 residents there will be many toddlers who will be able to use the children's "play areas" (the total size of these 4 areas is only about 1/3 of an acre, hardly enough for the number of young children who will be living here). The greater impact will fall on the 100+ children of school age. These children will need to get to parks and playing fields along streets lacking bicycle routes and with minimum sidewalks and by crossing several very busy and dangerous high traffic avenues.
The so called "swimming pool" appears to be merely a small wading pool, totally insufficient for 1,000 residents.

Response:

Access to recreational facilities by residents, both children and adults, of the proposed Wailuku Apartment Rental Housing Project is an important aspect of the project's proximity to existing infrastructure and services. Sidewalks provided by the project will provide pedestrian connectivity to the Waiale Park, located along Waiale Road, adjacent to the Hale Makana O Waiale apartments, and the Maui Lani Regional Park, located along Maui Lani Parkway. The Waiale Park is located approximately 0.25 mile from the project site, while the Maui Lani Regional Park is located

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approximately 0.9 mile from the project site. Both are accessible via signalized crosswalks and continuous sidewalks.

Comment No. 11:

Solid Waste: *The Draft-EA on page 34 mentions a private company being responsible for Solid Waste disposal. "Solid waste collection services for the project will be provided by a privately managed company and disposed at Maui County's Central Maui Landfill." Who will be required to pay for this company? Residents in affordable units?*

The Draft-EA does not show any locations for solid waste disposal / trash bins. There will be many of these for 324 units. Nor does it seem that big rubbish trucks will be able to turn around at the end of the 300'+ driveway. Backing up early in the morning will be a noisy disturbance. The response to this statement in my previous letter was incomplete and inadequate, only that the developer would look into it. However, that did not happen.

Response:

The project's design consultants will identify locations suitable for placement of trash bins. As with fire truck turnaround solutions being coordinated with the Department of Fire and Public Safety, turnaround areas for waste collection trucks will be configured into the final site plan to ensure that trash collection can be efficiently and safely conducted and managed. It is noted that the cost for waste collection service will be included as part of each tenant's monthly rental amount.

Comment No. 12:

Pedestrian Safety: *This revised DEA has many improved safety features for pedestrians: sidewalks on Kuikahi and a cross-walk from the project to Foodland and Longs.*

Unfortunately, there is only a partial sidewalk along Waiale Road. It goes from the driveway north to the intersection. However, to the south along Waiale there are other entitled projects and new ones proposed. To get to the nearby stores they will need a complete sidewalk along Waiale and it should be provided south of the Waiale Road exit/entrance. Because the project can gain 201-h approval only if "the proposed housing project is consistent with the purpose and intent of Section 201H-38, HRS, and the project's design meets all health and life safety requirements per the building code and Maui County Code."

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Response:

While the provision of sidewalks along the entire length of Waiale Road is desirable, there is no continuity of sidewalks provided along previously developed parcels which border Waiale Road. We would, however, be happy to discuss collaborative, nexus-based opportunities for the provisions of sidewalks along Waiale Road with the County of Maui and other landowners whose properties border Waiale Road.

Comment No. 13:

A&B's 2,550 unit Waiale project: *Maps on PDF pages 18 +35 and throughout the DEA do not show the major project to the South and to the East. The map and text should include the largest project (A&B's 2,550 unit Waiale project), the one that will have the greatest impact on the proposed Wailuku Apt project, and vice verso will be affected by the Wailuku Apt't project.*

Response:

The proposed Wailuku Apartment Rental Housing Project is anticipated to be completed and occupied by the year 2021. The context for project need recognizes that other development projects are ongoing, including new housing developments in Kehalani and Maui Lani. Other development proposals, including A&B's Waiale project, or other proposed projects within the Central Maui region, will contribute to meeting the island's housing needs. Collectively, in today's market, all projects, whether they be in Central Maui, South Maui, or West Maui, are considered complementary to addressing the housing shortage. Legacy Wailuku LLC does not view housing proposals in other locations of the island as being competitively detracting from the goal of providing housing to local families. We believe that all providers of new housing inventory join us in our goal of improving life quality on Maui.

Comment No. 14:

Water: *The Draft-EA PDF Pages 44 + 45 and Appendix D assume that the County Water system has existing adequate capacity for 189,000 GPD and 240,000 gallons for fire flow. What impact will the use of this water for this project have on not only Central Maui developments (many of which have sizeable affordable units), but also those planned in South Maui (again with sizeable affordable units)?*

Response:

Legacy Wailuku LLC is working with the Department of Water Supply (DWS) to ensure that sufficient water source will be available to serve the project, while ensuring that other affordable projects will have the same opportunity to access water in accordance with Maui County Code Section 14-12. We note that Legacy Wailuku LLC views the provision of affordable housing as a significant public benefit, irrespective of who is able to meet this need. We support other providers

of affordable housing and understand that each provider will have the same benefits provided by law with respect to water source availability.

Comment No. 15:

Parking: *The original draft contained only 486 parking stalls. This DEA has over 600. How was this change made? Have all the stalls been reduced in width/size? Will there be adequate parking space for pick-ups and larger vehicles? Special visitor parking? Handicapped parking?*

Response:

Additional code compliant parking, from 486 stalls (original draft) to 661 stalls, was provided by making site plan adjustments and providing the allowable number of tandem stalls. All stalls are standard size 8'-6" x 18'. Loading spaces are provided and ADA accessible stalls are provided. In compliance with Maui County Code, there are 488 full size stalls, 163 full size tandem stalls, 8 accessible stalls and 2 stalls that are van accessible

Comment No. 16:

300 foot+ driveway, cul-du-sac*: Since there is no turn around at the end of the 300'+ driveway and the parking lot could be full at night with 600+ cars, will firetrucks be able to access all buildings and be able to turn around, or even safely back-up?*

Response:

As part of the process of vetting the proposed project exemptions, Legacy Wailuku LLC has received preliminary comments from the County's Department of Fire and Public Safety. At present time, an exemption to Maui County Code, 16.04C, Fire Code will not be requested. The design team has met and will continue to meet with the Department of Fire and Public Safety during the early stages of preparing construction documents to address their concerns on fire protection, vehicular access, and to identify viable solutions for fire truck turnarounds.

Comment No. 17:

Project Management*: Will the County ever have any responsibilities if Legacy goes out of business? (Repairs? Ownership? Management? Utilities? Insurance? etc.)*
Who will manage the property? Establish homeowner association fees?
The impacts have yet to be discussed.

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Response:

This project is privately financed without direct government subsidies. Therefore, if Legacy Wailuku LLC does go out of business then the lender and investors will take over ownership and management of the project. This would be subject to a Declaration of Land Use Restrictive Covenants to be recorded on the fee simple title of the property, to ensure that affordability requirements are maintained pursuant to the 201H approval process. Legacy Partners and Pier Investments have a proven and strong track record that provides assurance that a reputable developer is managing this project. Legacy Wailuku LLC is also the management company responsible for insurance, utilities, repairs, etc. There are no homeowner association fees for this project.

These questions would be applicable for projects that use public funding to finance their projects. But again, as noted above, we are privately financed.

Comment No. 18:

Long-Term: *After the 30 years what will happen? Will renters ever have the right to purchase? Will rents suddenly rise?*

Response:

After the 30-year deed restriction expires, Legacy Wailuku LLC could renew their affordability commitment. Legacy Wailuku LLC could also offer the units for purchase, but such an alternative would require further coordination with the County of Maui. We are committed to providing tenants a "safety net" for housing. Any sudden increase in rents is contrary to our commitment to maintaining that "safety net".

Thank you again for providing comments on the Draft EA. A copy of your comment letter and this response letter will be included in the Final EA.

schatz collaborative
Mobile: 808.428.8717
Email: lindaschatz@schatzcollaborative.com
Schatzcollaborative.com

Should you have any questions regarding our responses, please feel free to contact me at email lindaschatz@schatzcollaborative.com or by phone at (808) 428-8717.

Very truly yours,

Linda Schatz

LS

cc: Ken Takahashi, Hawaii Housing Finance & Development Corporation
Vince Bagoyo, Bagoyo Development Consulting
Ben Lee, Clifford Planning & Architecture
Darren Unemori, Warren S. Unemori Engineering, Inc.
Tyler Fujiwara, Austin, Tsutsumi & Associates, Inc.
Erin Mukai, Munekiyo Hiraga
K:\DATA\Legacy\Wailuku Afford Rental\Applications\Draft EA\Draft EA responses\Dick Mayer.doc

REFERENCES XIV

XIV. REFERENCES

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APPENDIX A

PROJECT CONCEPTUAL PLANS



NOTE: ALL LANDSCAPE PLANTING AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM UTILIZING WATER AND ENERGY CONSERVING EQUIPMENT AND PRACTICES.

PRELIMINARY LANDSCAPE PLAN

0 50 150

50 25

NORTH
Scale: 1" = 50' - 0"

PRELIMINARY PLANT LIST:

1. LARGE SHADE TREES: (35' Canopy or Larger)
   e.g.: Kukui, Kamani, Koa
2. MEDIUM-SIZED SHADE TREES: (35' Canopy Max.)
   e.g.: Kou, Manele, Ho'awa
3. SMALL TREES: (16' Canopy Max.)
   e.g.: 'Ohi'a, Hala, Koai'a, Alahe'e
4. LARGE SPECIMEN SHADE TREE:
   e.g.: Monkeypod (Existing Onsite tree to be relocated)
5. SINGLE-TRUNKED PALMS:
   e.g.: Coconut, Loulu
6. MULTI-TRUNKED PALMS:
   e.g.: Areca, MacArthur
7. SHRUBS:
   e.g.: A'ali'i, Anapanapa, Blue Vitex, Nanu, Koki'o Ke'oke'o, 'Ulei, Beach Naupaka, Pikake, Ma'o, Ma'o Hau Hele, Kulu'i
8. GROUND COVERS:
   e.g.: 'Ilima papa, Nehe, Kupukupu Fern, Pili Grass, Pohinahina, Naio Papa, 'Uki'uki
9. GRASSES:
   e.g.: Hybrid Bermuda, El Toro Zoysia

RUSSEL Y. GUSHI
ASLA
LANDSCAPE ARCHITECT

P.O. BOX 2291
WAILUKU, MAUI, HAWAII 96793
TEL: (808) 242-6503
e-mail: yoshigushi@hawaii.rr.com

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT No. 459 STATE OF HAWAII

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

LICENSE EXPIRES: APRIL 30, 2018

WAILUKU WORKFORCE APARTMENTS
TMK: (2) 3-5-001-064
EAST KUIKAHEI DRIVE & WAIALE ROAD
WAILUKU, MAUI, HAWAII

PRELIMINARY LANDSCAPE PLAN

NO.	DATE	REVISION	BY

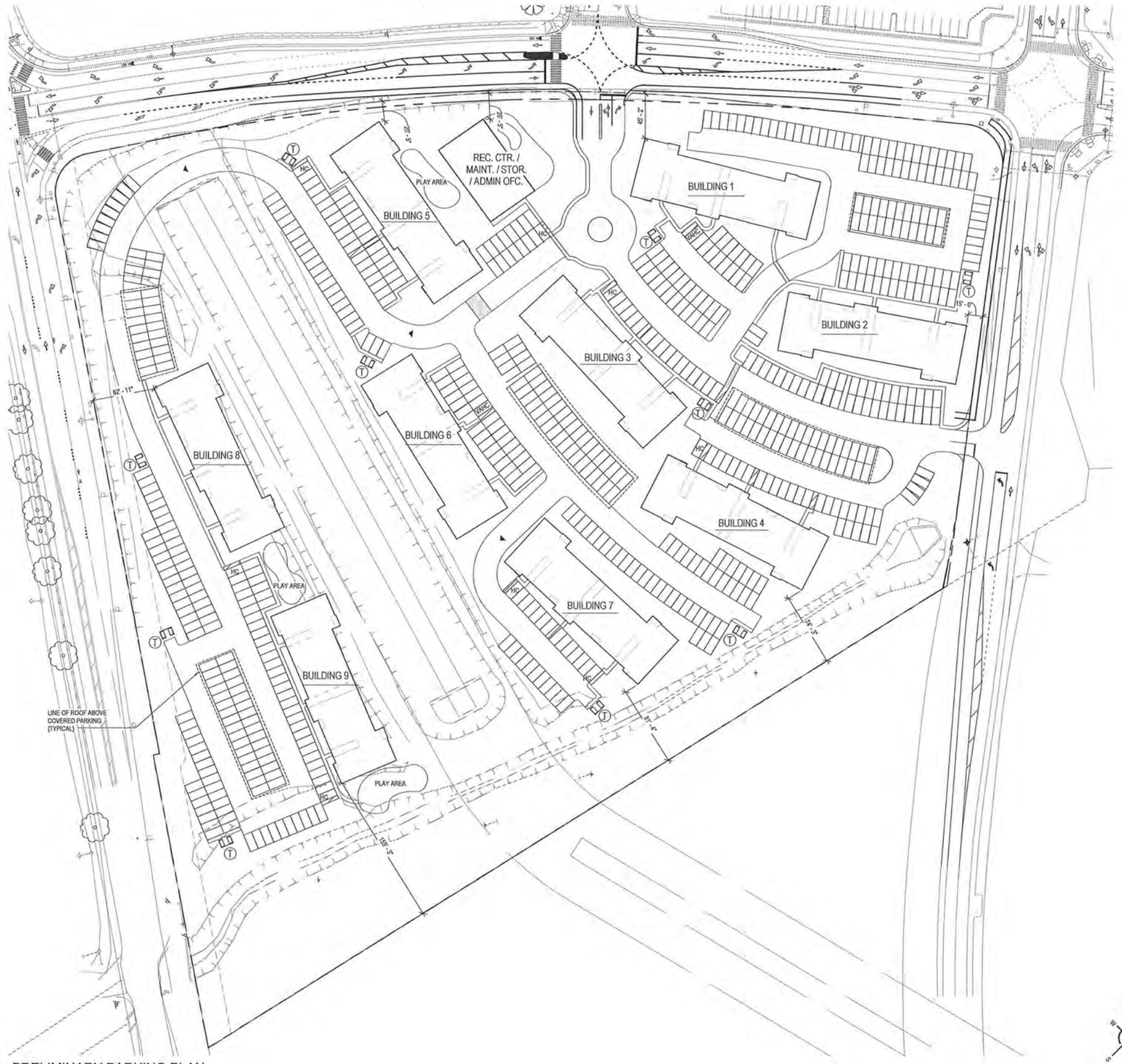
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PROJECT NO: 17-06

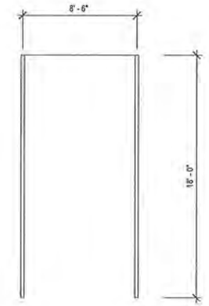
DATE: JULY, 2017

DRAWING NO: LP-1

SHEET OF



1 PRELIMINARY PARKING PLAN
1" = 40'-0"



2 PARKING STALL DETAIL
1/4" = 1'-0"
0 1 2 4 8

PARKING ANALYSIS	
FULL SIZE:	488
TANDEM:	163
ACCESSIBLE:	8
(1:6 VAN ACCESSIBLE):	2
TOTAL:	661

PROGRAMMED:
324 x 2 = 648 RESIDENT STALLS
5,000 SF @ 1:500 SF = 10 ADMIN OFC. STALLS

PARKING PLAN LEGEND

T	TRASH
HC	ACCESSIBLE STALLS
V	VAN ACCESS

Clifford Planning Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE	DESCRIPTION	BY

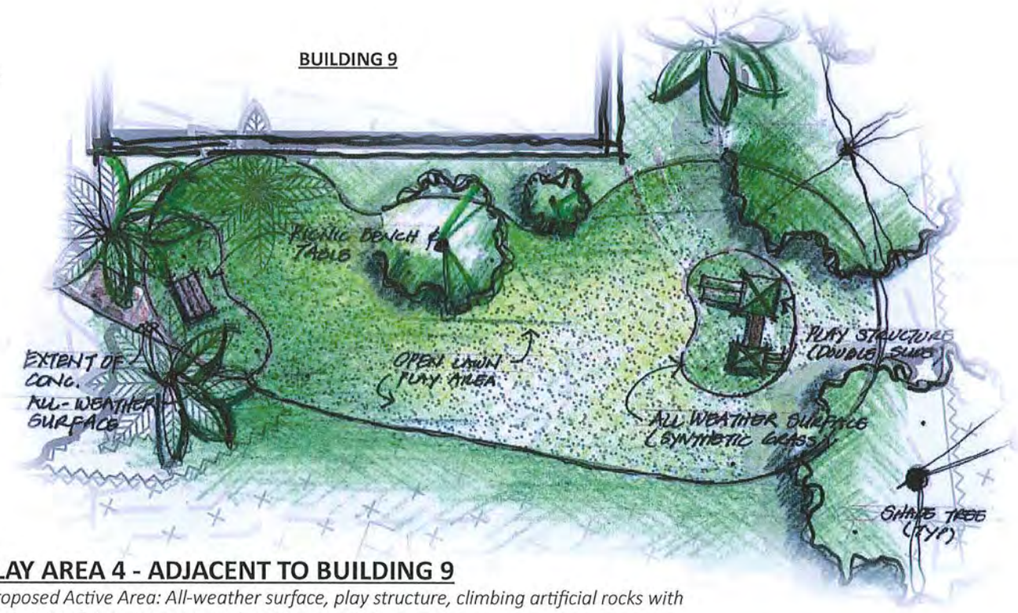
Authorization to use these plans for the issuance of a Building Permit shall be evidenced only by the appearance of the Architect's stamp below, together with the original signature of the Architect.

This work was prepared by me or under my supervision and construction of this project will be under my observation. (Observation of construction as defined in Section 16-115-9 of the State of Hawaii, Department of Commerce and Consumer Affairs, Hawaii Administrative Rules, for Professional Engineers, Architects, Surveyors, and Landscape Architects 10/26/01)

LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

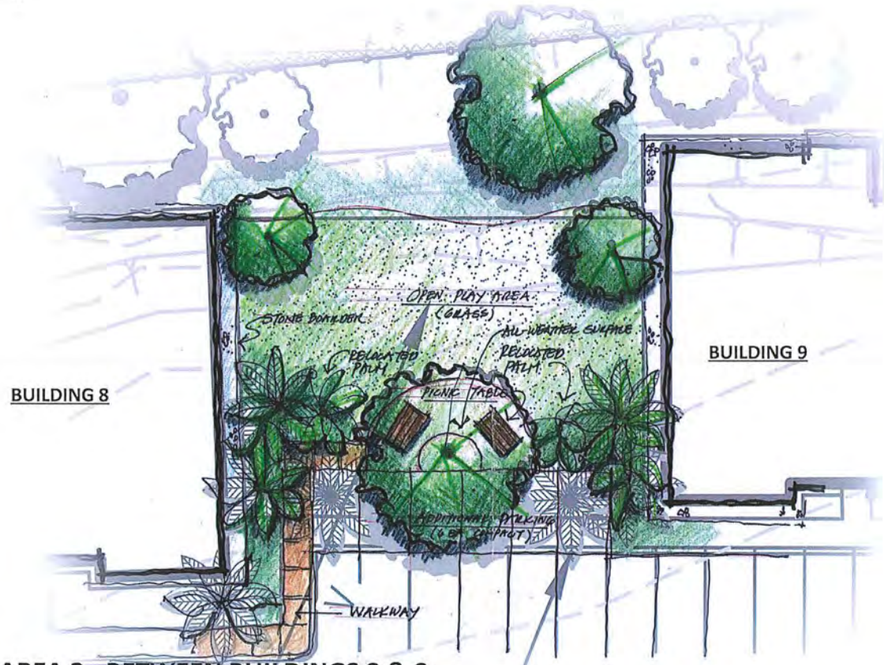
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PROJECT NUMBER:	416.007
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DATE:	02/09/2018 (R1)
SCALE:	As indicated
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CHECKED BY:	BL
DRAWING NO:	A100
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PLAY AREA 4 - ADJACENT TO BUILDING 9

(Proposed Active Area: All-weather surface, play structure, climbing artificial rocks with picnic table & bench in proposed open grassed play area.)



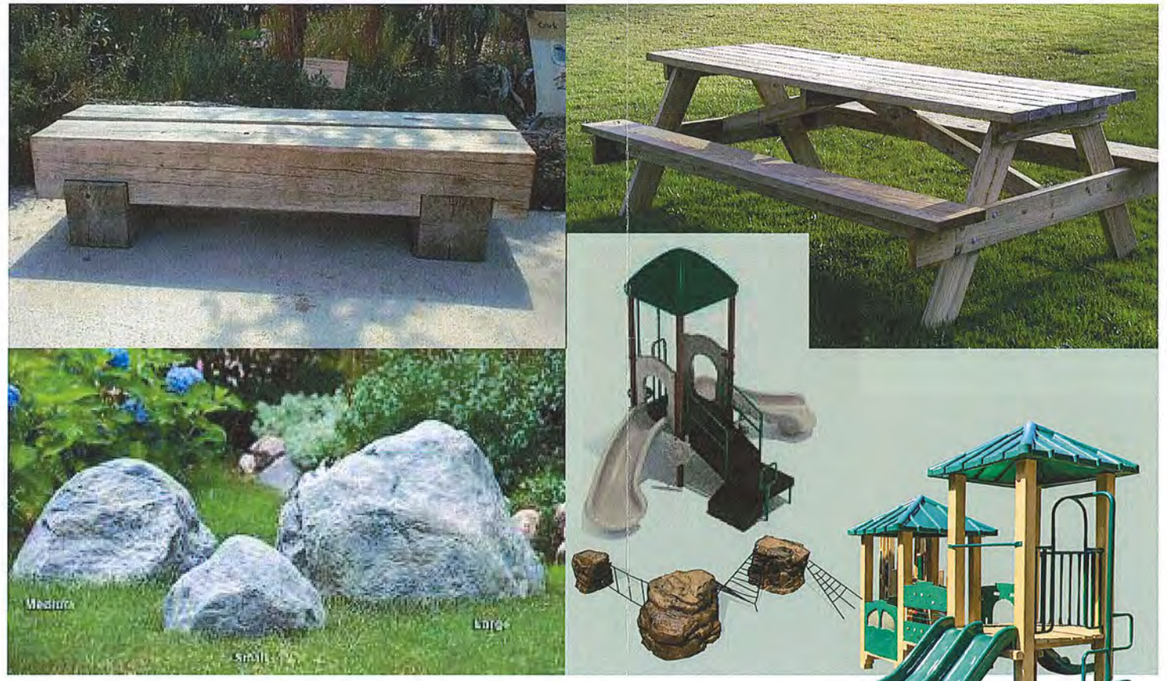
PLAY AREA 3 - BETWEEN BUILDINGS 8 & 9

(Proposed Passive Area: All-weather surface, picnic tables & bench in proposed open smaller grassed play area. Additional tandem parking provided.)



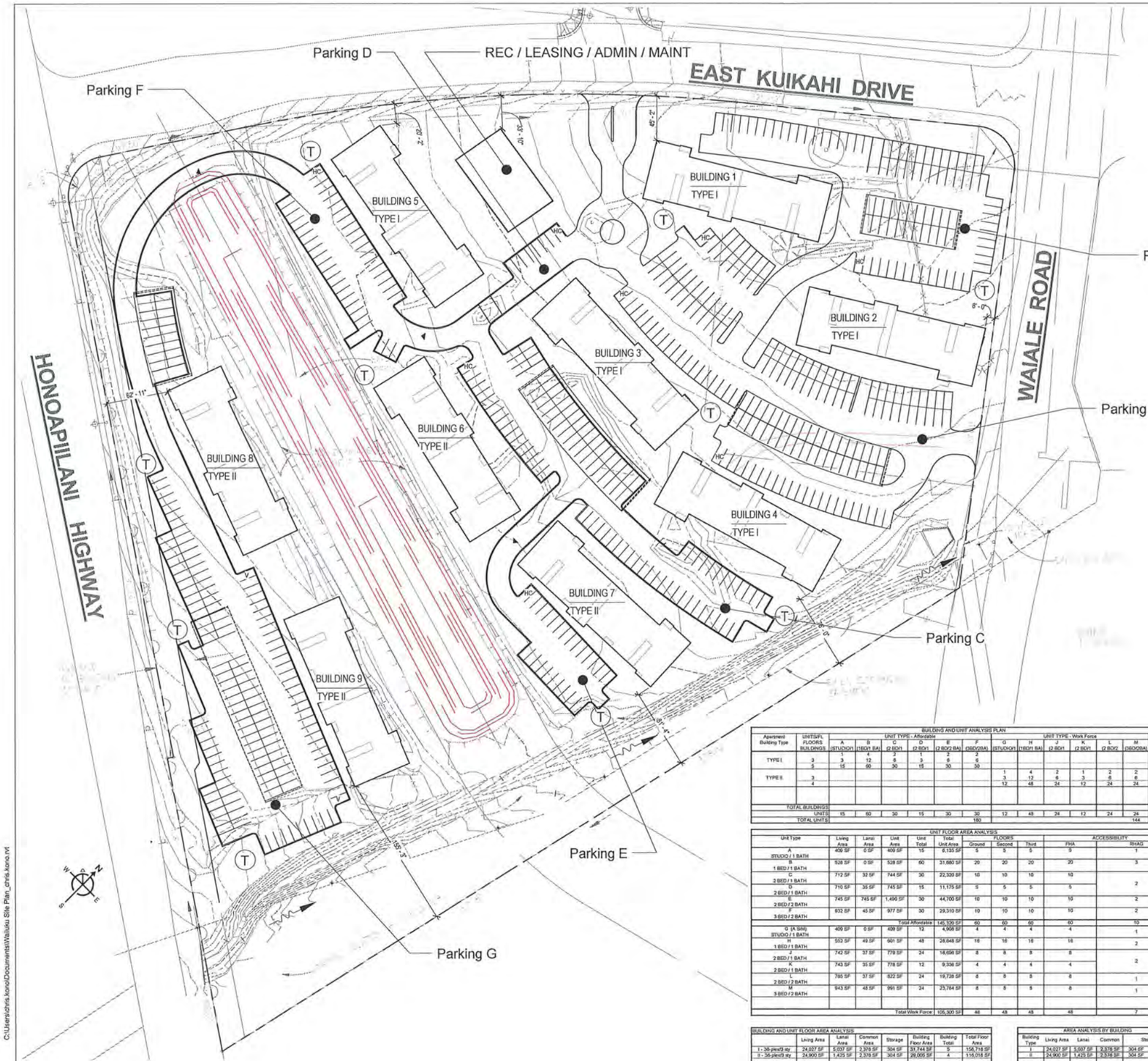
PLAY AREA 1&2 - ADJACENT TO COMMUNITY CENTER & POOL

(Proposed Active Area: PA 1: All-weather surface, play structure, climbing artificial rocks and benches in proposed open grassed play area. PA 2: All-weather surface, climbing rocks & cargo nets w/ 3ea putting holes.)



OPEN LAWN PLAY AREA CONCEPTS

CliffordPlanning LLC Architecture



SITE PLAN LEGEND

- (T) TRASH
- HC ACCESABLE STALLS
- V VAN ACCESS

BUILDING AND UNIT ANALYSIS PLAN

Apartment Building Type	UNITS/FL BUILDINGS	UNIT TYPE - Affordable A (STUDIO)	B (1BD/1 BA)	C (2 BD/1	D (2 BD/1	E (2 BD/2 BA)	F (3BD/2BA)	UNIT TYPE - Work Force G (STUDIO/1	H (1BD/1 BA)	J (2 BD/1	K (2 BD/1	L (2 BD/2	M (3BD/2BA)	Total
	1			1	1	2	2							12
TYPE I	3	3	12	8	3	6	6							38
	5	15	60	30	15	30	30							180
	1							1	4	2	1	2	2	12
TYPE II	3							3	12	6	3	6	6	36
	4							12	48	24	12	24	24	144
TOTAL BUILDINGS:														9
UNITS:		15	60	30	15	30	30	12	48	24	12	24	24	
TOTAL UNITS:							180						144	324

UNIT FLOOR AREA ANALYSIS

Unit Type	Living Area	Lanai Area	Unit Area	Unit Total	Total Unit Area	FLOORS Ground	Second	Third	ACCESSIBILITY FHA	RHAG	
A STUDIO / 1 BATH	409 SF	0 SF	409 SF	15	6,135 SF	5	5	5	9	1	
B 1 BED / 1 BATH	528 SF	0 SF	528 SF	60	31,680 SF	20	20	20	20	3	
C 2 BED / 1 BATH	712 SF	32 SF	744 SF	30	22,320 SF	10	10	10	10	2	
D 2 BED / 1 BATH	710 SF	35 SF	745 SF	15	11,175 SF	5	5	5	5		
E 2 BED / 2 BATH	745 SF	745 SF	1,490 SF	30	44,700 SF	10	10	10	10	2	
F 3 BED / 2 BATH	932 SF	45 SF	977 SF	30	29,310 SF	10	10	10	10	2	
				Total Affordable	145,320 SF	60	60	60	60	10	
G (A SIM) STUDIO / 1 BATH	409 SF	0 SF	409 SF	12	4,908 SF	4	4	4	4	1	
H 1 BED / 1 BATH	552 SF	49 SF	601 SF	48	28,848 SF	16	16	16	16	2	
J 2 BED / 1 BATH	742 SF	37 SF	779 SF	24	18,696 SF	8	8	8	8	2	
2 BED / 1 BATH	743 SF	35 SF	778 SF	12	9,336 SF	4	4	4	4		
K 2 BED / 2 BATH	785 SF	37 SF	822 SF	24	19,728 SF	8	8	8	8	1	
M 3 BED / 2 BATH	943 SF	48 SF	991 SF	24	23,784 SF	8	8	8	8	1	
				Total Work Force	105,300 SF	48	48	48	48	7	

BUILDING AND UNIT FLOOR AREA ANALYSIS

	Living Area	Lanai Area	Common Area	Storage	Building Floor Area	Building Total	Total Floor Area
I - 36-plex/3 sty	24,027 SF	5,037 SF	2,376 SF	304 SF	33,744 SF	5	168,718 SF
II - 36-plex/3 sty	24,900 SF	1,425 SF	2,376 SF	304 SF	29,005 SF	4	116,018 SF
				TOTAL		9	374,736 SF

AREA ANALYSIS BY BUILDING

Building Type	Living Area	Lanai	Common	Storage	
I	24,027 SF	5,037 SF	2,376 SF	304 SF	24 / bldg
II	24,900 SF	1,425 SF	2,376 SF	304 SF	24 / bldg

*Note: The above area calculations are preliminary and require verification through the architectural design/review process.

Accessibility:
- All ground floor 1- story units shall comply with the Federal Fair Housing Act Accessibility Guidelines (FHA)
- All public and accessible routes shall comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- 5% of total units shall comply with the Hawaii State Residential Housing Accessibility Guidelines (RHAG)
- 2% of total units shall comply with Visual and Audio requirements.

DENSITY

Land Area (Acres)	Units/Acre
14.416	22.475

PARKING ANALYSIS

Programmed: 324 x 1.5 = 486 Stalls	
Full Size	375
Tandem	101
Guest	76
Accessible	8
(1:6 Van Accessible)	2
TOTAL	562
Loading	6
Mail area	2

FACILITIES

Rec Center	2,500 SF
Lease / Admin / Maint	2,500 SF
Exterior Storage 50 units (8'x9')	2,160 SF
Trash Enclosures 12	
TOTAL	4,672 SF

ZONING INFORMATION

APPLICABLE ORDINANCE:	CODE OF THE COUNTY OF MAUI EFFECTIVE 05/09/16
LOCATION:	WAIALE ROAD, WAILUKU, MAUI, HAWAII
TAX MAP KEY:	(2)3-5-001:064
LOT AREA	14.416 ACRES (627,961 SF)
LUC CLASSIFICATION:	URBAN (REDESIGNATED FROM AGRICULTURAL)
SPECIAL MANAGEMENT AREA (SMA)	NOT WITHIN SMA
GENERAL PLAN:	COUNTY OF MAUI 2030 GENERAL PLAN
MAUI ISLAND PLAN:	WITHIN URBAN GROWTH BOUNDARY
PLANNING DISRICT:	KAHULUI-WAILUKU COMMUNITY PLAN DISTRICT
	WITHIN GROWTH RESERVE
ZONING DISTRICT:	A-2 APARTMENT (REDESIGNATED FROM AGRICULTURAL)
FLOOD ZONE:	ZONE X
HEIGHT LIMIT (A-2)	60 FT
SETBACKS: FRONT YARD	20 FT
REAR YARD	20 FT
SIDE YARD	15 FT
MAX FAR	60 PERCENT (585,165 SF)
PROJECT FAR*	374,736 SF
MAX LOT COVERAGE	35 PERCENT (219,786 SF)
PROJECT LOT COVERAGE	88,519 SF

BUILDING CODE INFORMATION

APPLICABLE CODE:	INTERNATIONAL BUILDING CODE, 2009 EDITION AS AMMENDED
TYPE OF CONSTRUCTION:	II-B SPRINKLED
OCCUPANCY CLASSIFICATION:	R-2
ALLOWABLE BUILDING AREA PER STORY	As = [At + [At x If] + [At x Is]]
	At = 7,000
	If = 0
	Is = 2
	21,000 = [7,000 + [7,000 x 0] + [7,000 x 2]]
BUILDING TYPE I AREA PER STORY:	9,710 SF
BUILDING TYPE II AREA PER STORY:	10,012 SF

0' 10' 20' 40' 80'

1 WAILUKU DEVELOPMENT - SITE PLAN
1" = 40'-0"

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CliffordPlanning Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE:	DESCRIPTION	BY

Authorization to use these plans for the issuance of a Building Permit shall be evidenced only by the appearance of the Architect's stamp below, together with the original signature of the Architect.

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

PROJECT NAME: WAILUKU DEVELOPMENT

PROJECT NUMBER: 416.007

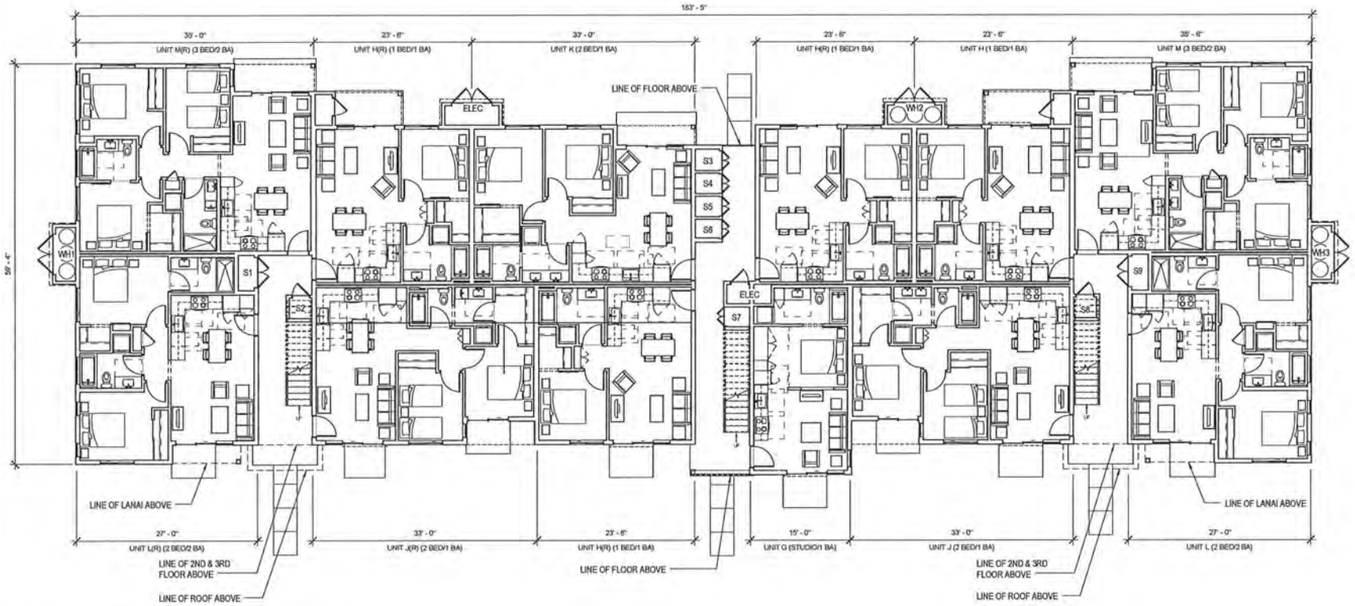
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DATE: JUNE 28, 2017

SCALE:	DRAWN BY:	CHECKED BY:
As indicated	RY	JC

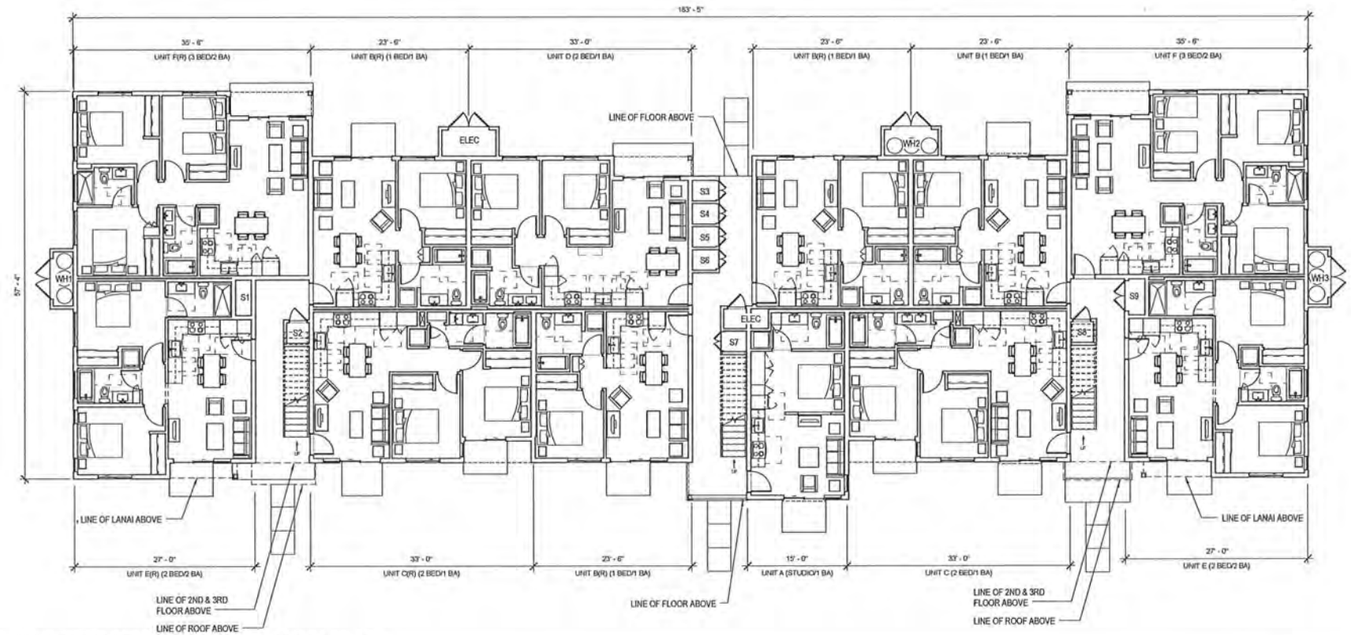
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2 BUILDING TYPE II OVERALL FLOOR PLAN

1/8" = 1'-0"



1 BUILDING TYPE I OVERALL FLOOR PLAN

1/8" = 1'-0"

NORTH
WEST
EAST
SOUTH

0' 2' 4' 8' 16'

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HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813

PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI,
HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
OVERALL BUILDING PLANS

DATE: JUNE 28, 2017

SCALE:	DRAWN BY:	CHECKED BY:
1/8" = 1'-0"	KK/SE	JC

DRAWING NO: A101

SHEET __ OF __

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4 NORTH ELEVATION
1/8" = 1'-0"

3 EAST ELEVATION
1/8" = 1'-0"

2 WEST ELEVATION
1/8" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"

0' 2' 4' 8' 16'

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HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:

NO.	DATE:	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
BUILDING TYPE I ELEVATIONS

DATE: JUNE 28, 2017

SCALE:	DRAWN BY:	CHECKED BY:
1/8" = 1'-0"	KK / RY	JC

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4 NORTH ELEVATION
1/8" = 1'-0"



3 EAST ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"

0' 2' 4' 8' 16'

CliffordPlanning Architecture
HARBOR COURT
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CONSULTANT:

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
BUILDING TYPE II ELEVATIONS

DATE: JUNE 28, 2017

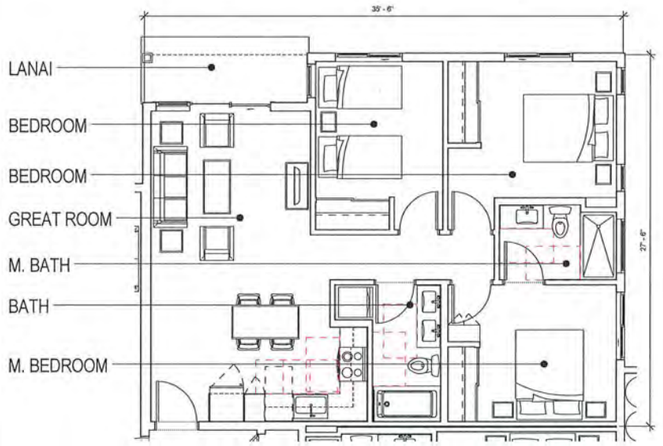
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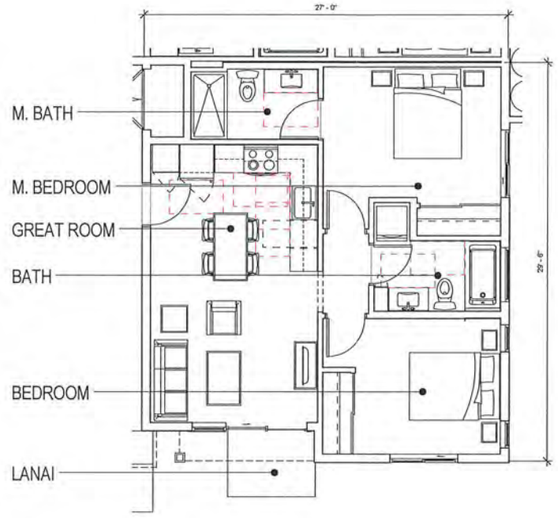
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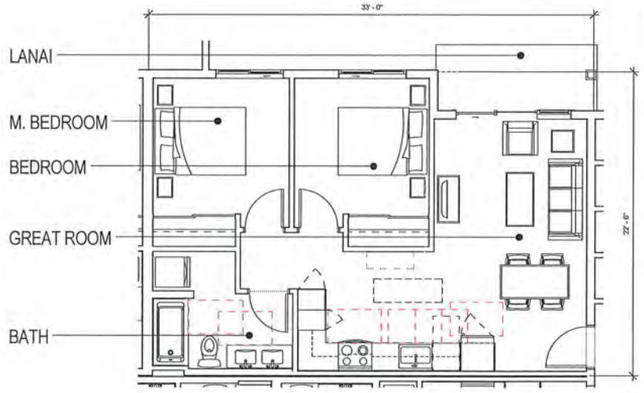
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ALL CLEARANCES SHOWN DASHED
DERIVED FROM FFHAA DESIGN GUIDELINES



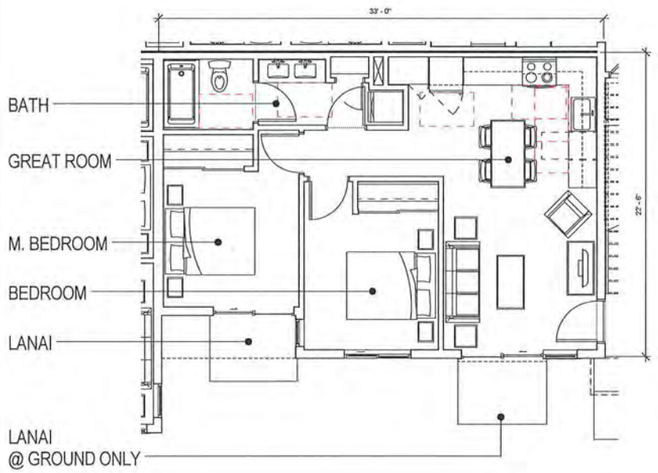
6 UNIT F (3BD/2BA)
1/4" = 1'-0"



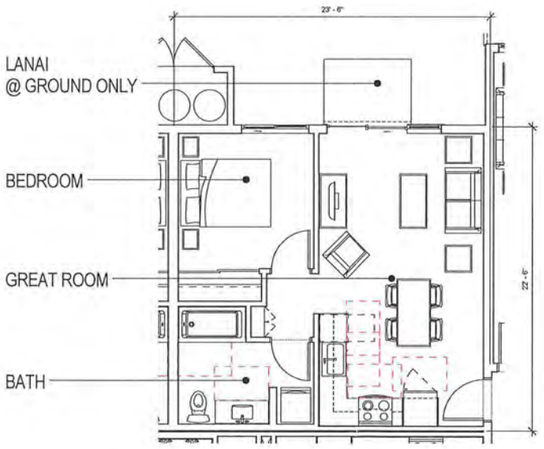
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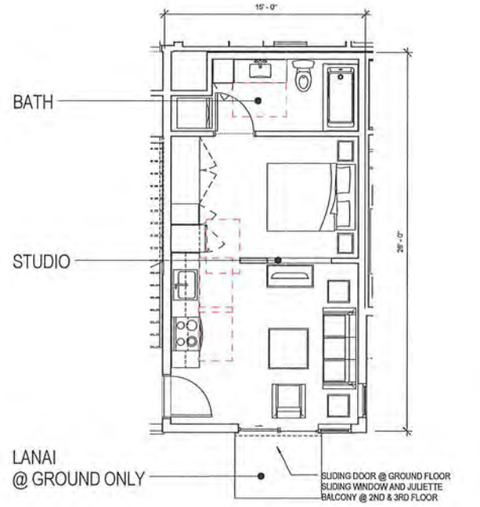
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1/4" = 1'-0"



3 UNIT C (2BD/1BA)
1/4" = 1'-0"



2 UNIT B (1BD/1BA)
1/4" = 1'-0"



1 UNIT A (STUDIO)
1/4" = 1'-0"

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CONSULTANT:

NO.	DATE:	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI,
HAWAII

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
BUILDING TYPE I ENLARGED UNIT PLANS

DATE: JUNE 28, 2017

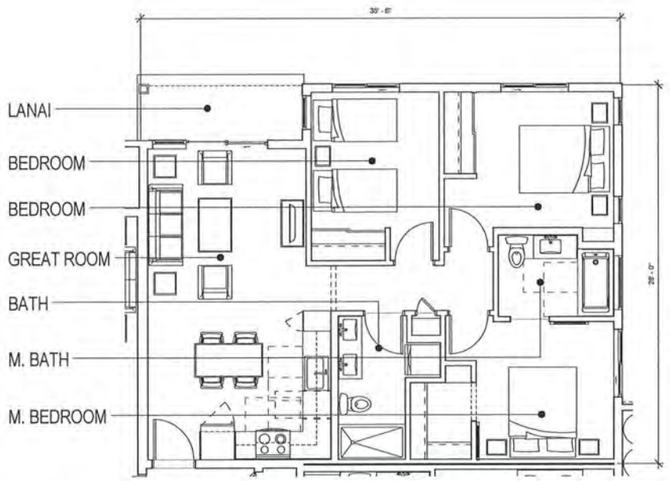
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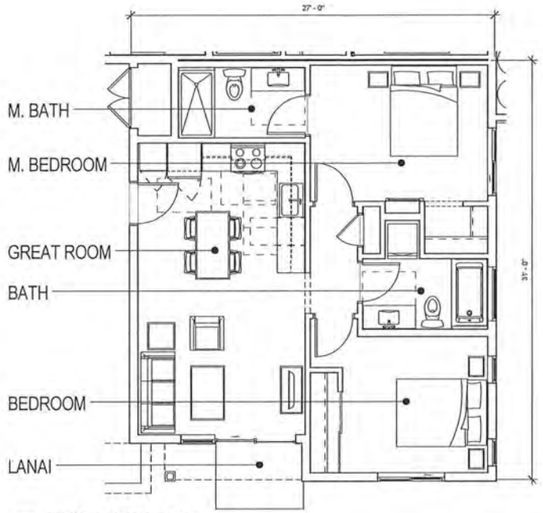
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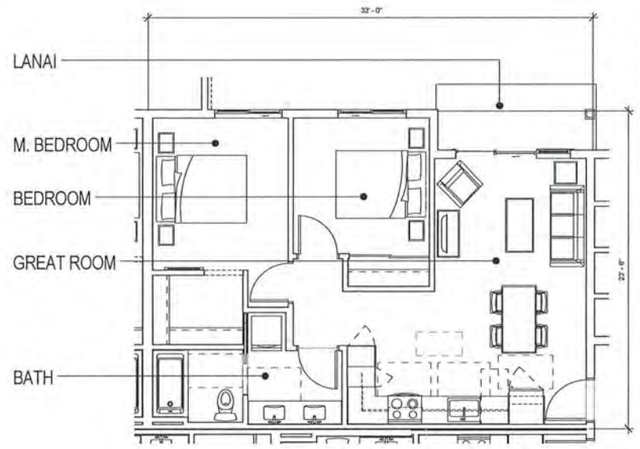
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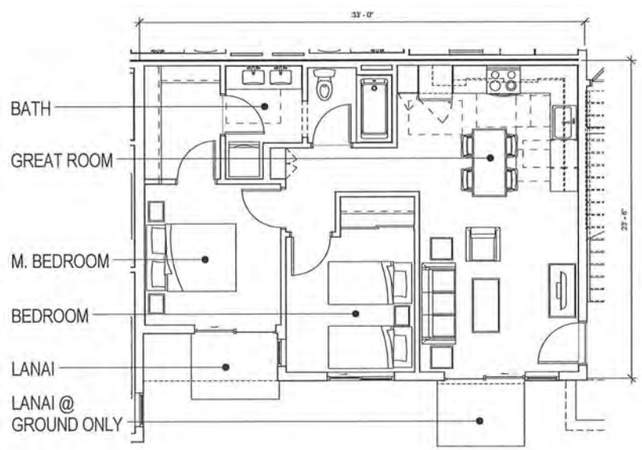
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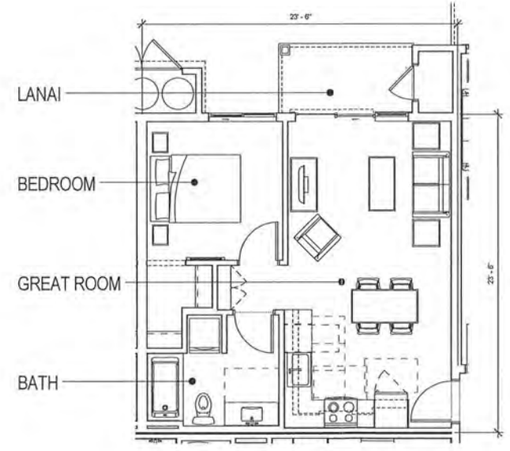
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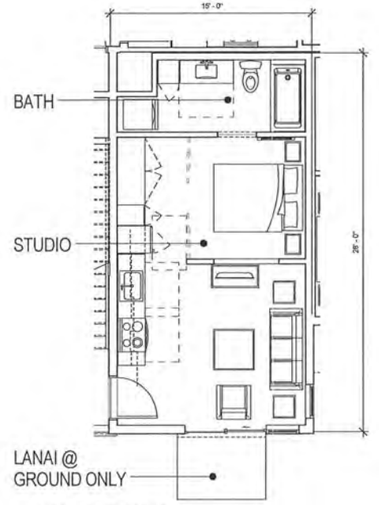
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2 UNIT H (1BD/1BA)
1/4" = 1'-0"



1 UNIT G (STUDIO)
1/4" = 1'-0"

0' 1' 2' 4' 8'

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CONSULTANT:

NO.	DATE:	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
BUILDING TYPE II ENLARGED UNIT PLANS

DATE: JUNE 28, 2017

SCALE:	DRAWN BY:	CHECKED BY:
1/4" = 1'-0"	KK/SE	JC

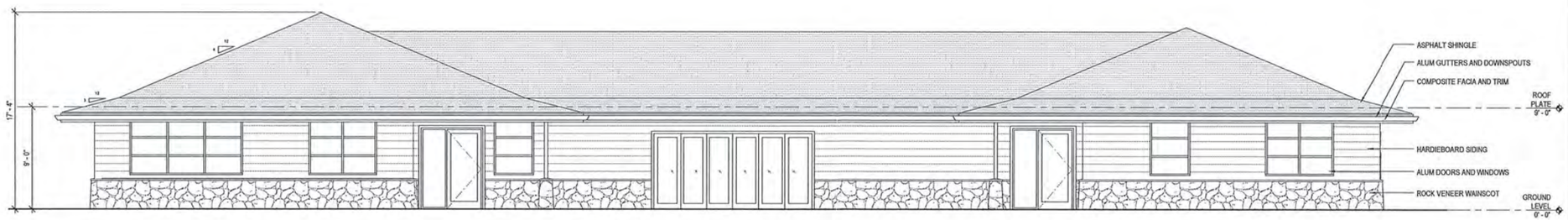
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1 COMMUNITY CENTER FLOOR PLAN

1/4" = 1'-0"



2 COMMUNITY CENTER FRONT ELEVATION

1/4" = 1'-0"

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55 MERCHANT STREET, SUITE 3020
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CONSULTANT:

NO.	DATE	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

PROJECT NAME: WAILUKU APARTMENTS

PROJECT NUMBER: 416.007

TITLE:
COMMUNITY CETNER OVERALL FLOOR PLAN AND ELEVATION

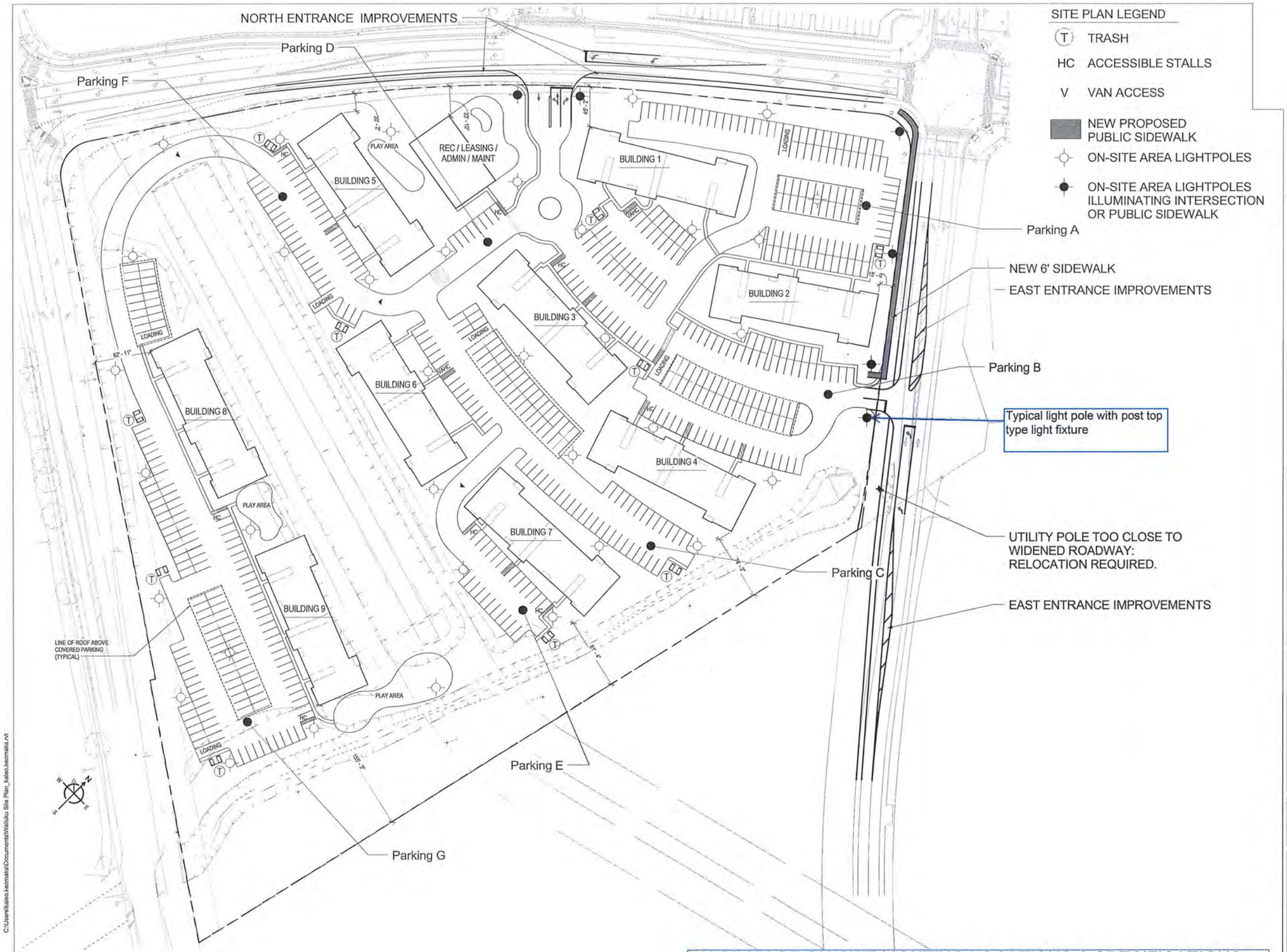
DATE: MARCH 09, 2018

SCALE:	DRAWN BY:	CHECKED BY:
1/4" = 1'-0"	KK	JC

DRAWING NO:

A106

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SITE PLAN LEGEND

- (T) TRASH
- HC ACCESSIBLE STALLS
- V VAN ACCESS
- NEW PROPOSED PUBLIC SIDEWALK
- ON-SITE AREA LIGHTPOLES
- ON-SITE AREA LIGHTPOLES ILLUMINATING INTERSECTION OR PUBLIC SIDEWALK

DIAGRAM OF ON-SITE LIGHTING LOCATIONS & SPECIFICATIONS

1 PRELIMINARY CONCEPT SITE PLAN
1" = 40'-0"

0' 10' 20' 40' 80'

Clifford Planning & Architecture
HARBOR COURT
55 MERCHANT STREET, SUITE 3020
HONOLULU, HAWAII 96813
PHONE: 808.537.1200 FAX: 808.537.2271

CONSULTANT:
ELECTRICAL CONSULTANT: ECS, Inc.

NO.	DATE	DESCRIPTION	BY

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LEGACY PARTNERS
WAIALE ROAD, WAILUKU, MAUI, HAWAII
(2)3-5-001:064

PROJECT NAME:	WAILUKU WORKFORCE APARMENTS
PROJECT NUMBER:	416.007
TITLE:	PRELIMINARY SITE LIGHTING
DATE:	SEPTEMBER 7, 2017
SCALE: As Indicated	DRAWN BY: RY / CHECKED BY: JC
DRAWING NO:	E100
SHEET ___ OF ___	

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APPENDIX B

PRELIMINARY ENGINEERING REPORT

Established 1969

Preliminary Engineering Report

WAILUKU APARTMENTS

Wailuku, Maui, Hawaii
TMK: (2) 3-5-001: 064

Prepared For:

Pier Management – Hawaii, LLC
3401 East Kentucky Avenue
Denver, Colorado 80209

WARREN S. UNEMORI ENGINEERING, INC.
Civil and Structural Engineers – Land Surveyors
Wells Street Professional Center – Suite 403
2145 Wells Street
Wailuku, Maui, Hawaii 96793

March 9, 2018

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Preliminary Engineering Report
for
Wailuku Apartments 201H Application

1. INTRODUCTION

1.1 Purpose

This report discusses the existing infrastructure available to the Wailuku Apartments project, the improvements to be made, and the infrastructure-related exemptions that will be sought to enable implementation of the proposed development plan.

1.2 Project Description

The Wailuku Apartments project consists of a single 14.416 acre, Agricultural-zoned land parcel located in Wailuku, Maui, on which developer Pier Management - Hawaii, LLC proposes to construct nine multi-family buildings comprising 324 affordable and market-rate rental apartments. The project parcel is located on the south side of Kuikahi Drive, across the street from the Kehalani Village Center. It is bounded by Honoapiilani Highway to the west; Kuikahi Drive to the north; and Waiale Road to the east.

2. ROADWAY IMPROVEMENTS

2.1 Existing Conditions

The Wailuku Apartments project site is accessible from both Waiale Road and Kuikahi Drive, which are controlled by the County of Maui and classified as limited-access collector streets. No vehicular access is allowed from the project parcel onto Honoapiilani Highway, which is controlled by the State of Hawaii Department of Transportation's Highways Division.

2.2 Proposed Improvements

2.2.1 Vehicular Access

Vehicular access to Wailuku Apartments will be provided by two driveways constructed on Waiale Road and Kuikahi Drive. The driveway entrance on Kuikahi Drive will be located directly opposite the existing driveway into the Kehalani Village Center shopping complex. (See Figure 2-1)

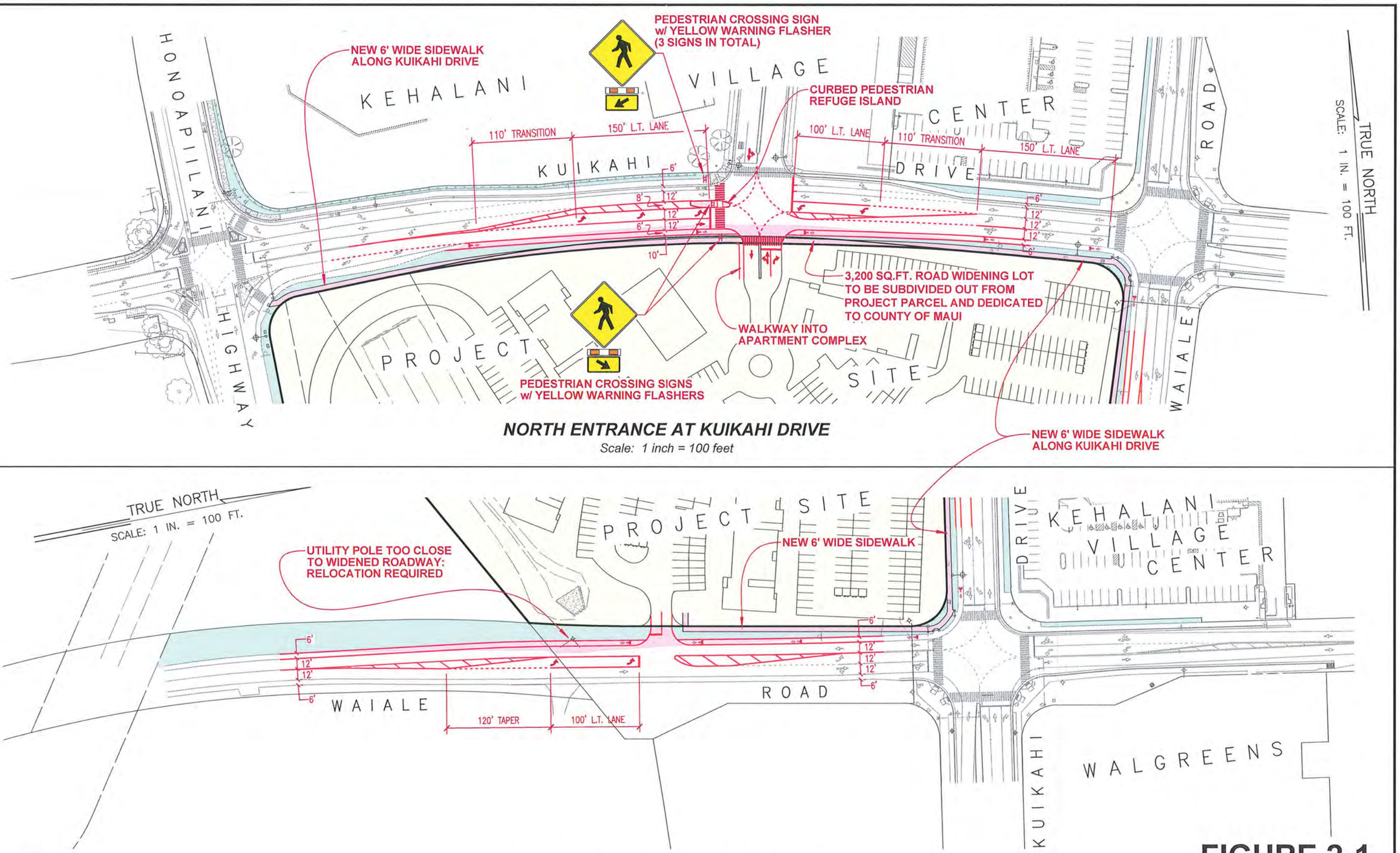
Pavements on both Kuikahi Drive and Waiale Road will be widened to accommodate the left turn lanes at each driveway recommended by the Traffic Report for this project.[1] (See Figure 2-2)

[1] Austin Tsutsumi & Associates, Inc., "Traffic Impact Analysis Report for Wailuku 201H Residential Development," April 28, 2017, p.35.

2.2.2 Bike and Pedestrian Access

6-foot wide paved sidewalks will be installed along the south and west sides of Kuikahi Drive and Waiale Road to link Wailuku Apartments to the existing signalized pedestrian crossings at the Kuikahi Drive/Waiale Road and Honoapiilani Highway/Kuikahi Drive intersections. A curbed pedestrian refuge island and signs with push-button warning flashers will be added to the unsignalized mid-block pedestrian crosswalk on Kuikahi Drive to make a direct crossing between the apartment complex and Kehalani Village Center safer. Altogether, these improvements will complete safe, all-weather pedestrian routes from the apartment complex to the nearby Pu'u Kukui Elementary School, Kehalani Village Center shopping area, Walgreens drug store, and businesses in the Maui Lani Village Center.

6-foot wide bike lanes provided along Waiale Apartments' Waiale Road and Kuikahi Drive street frontages will provide bicycle access to both of its driveway entrances.



NORTH ENTRANCE AT KUIKAHI DRIVE

Scale: 1 inch = 100 feet

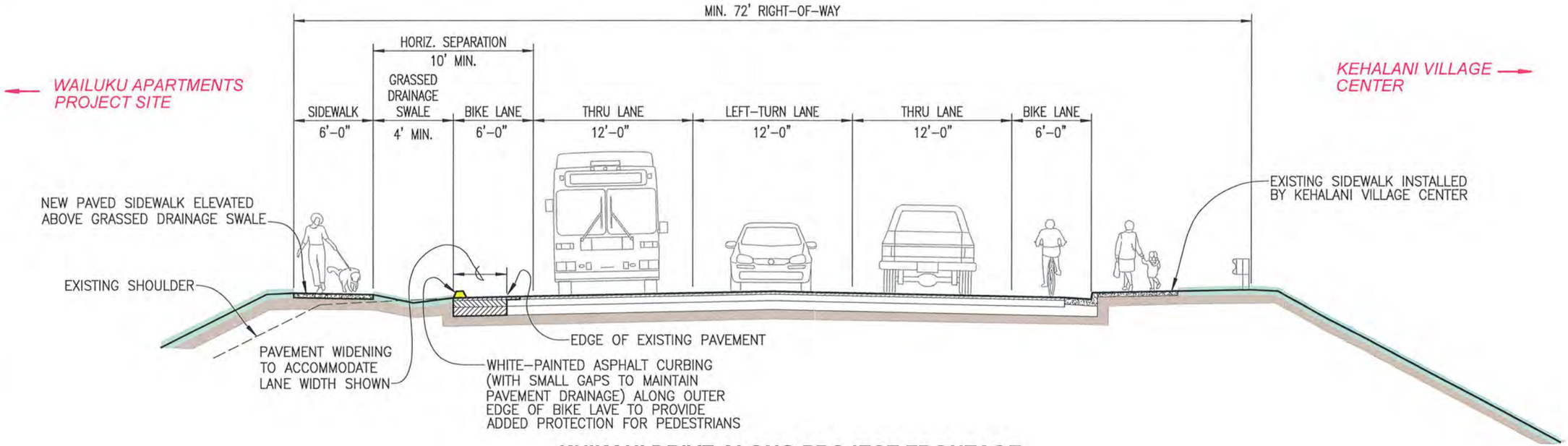
EAST ENTRANCE AT WAIALE ROAD

Scale: 1 inch = 100 feet

NOTE:
RED SHADING DENOTES AREAS OF PAVEMENT WIDENING

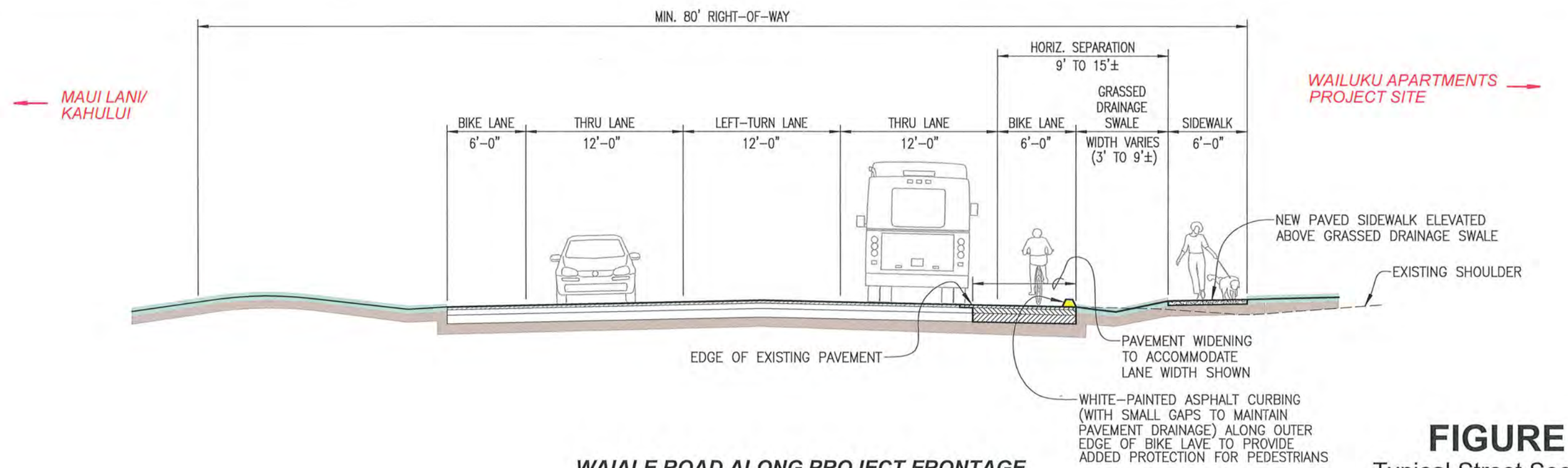
FIGURE 2-1
Proposed Access Improvements

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KUIKAHI DRIVE ALONG PROJECT FRONTAGE

Scale: 1 inch = 8 feet



WAIALE ROAD ALONG PROJECT FRONTAGE

Scale: 1 inch = 8 feet

FIGURE 2-2

Typical Street Sections:
Kuikahi Dr. and Waiale Rd.

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3. STORM DRAINAGE

3.1 Existing Conditions

3.1.1 Topography and Soils

The project site was historically used for the cultivation of sugar cane by the Wailuku Sugar Company; however, in recent years it has been used as a construction equipment and material storage yard.

The existing terrain slopes steadily downward from southwest to northeast across the project area at a grade of approximately 5 percent. Elevations across the project site range from approximately 360 feet at its southwest corner, to roughly 306 feet at its northeast corner. An existing natural drainageway follows the southern boundary of the project site, connecting a drainage culvert at Honoapiilani Highway to a second culvert crossing at Waiale Road. An existing man-made drainage channel crosses the parcel in a north-to-south direction, bisecting the site.

The USDA Natural Resources Conservation Service identifies Iao clay (IcB) and Iao silty clay (IaA) as the predominant soil types found on the project site. These soils are characterized as presenting a slight to moderate erosion hazard.[2]

---

[2] United States Department of Agriculture, Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, August 1972, pp. 46-47, Maps 99-100.

3.1.2 Flood and Tsunami Zone

The Federal Emergency Management Agency's Flood Insurance Rate Map for Maui County locates the project site within Zone X, outside both the 500-year floodplain and tsunami zone.[3] A current DLNR Flood Hazard Assessment Report for the parcel can be found in Appendix A-1.

3.1.3 Existing Drainage Conditions

Offsite Flows

Three distinct drainage systems pass through the project site.

1) A natural drainageway, shown in green on Figure 3-1, conveys storm runoff from lands mauka of Honoapiilani Highway[4] to the (normally dry) overflow basin at Alexander & Baldwin's Waiale irrigation reservoir. This gully conveys a 100-year storm flow of approximately 1,700 cfs across the project site in a mauka-makai (west-to-east) direction near its southern boundary.[5]

---

[3] U.S. Department of Homeland Security, Federal Emergency Management Agency, *Flood Insurance Rate Map, Maui County, Hawaii,* Community-Panel Number 150003 0391E, September 25, 2009.

[4] The lands discharging runoff to this gully include portions the Wailuku Heights Subdivision, the undeveloped mountainside above the subdivision, and the undeveloped pasturelands between the Wailuku Heights Subdivision and Honoapiilani Highway.

[5] The existing natural gully has too small a cross-section to contain the 100-year storm flow entirely within the main stem of the channel as it crosses the project site. Figure 3-2 indicates the portion of the site which is likely to be inundated should this channel overflow.

Careful readers of this report may notice that FEMA's Flood Insurance Map Panel 0391E locates the project site in Zone X and does not indicate that a potential local flooding condition like that described above may exist along the existing drainage channel. This seeming inconsistency is the result of FEMA's flood studies having a broad, regional focus: examining the effects of only the largest channels

2) A man-made drainageway, shown in red on Figure 3-1, conveys storm runoff from the residential developments in the Mauka portion of the Kehalani Project District to a large stormwater retention basin in Waikapu located to the east of Waikapu Gardens Subdivision. The open drainage channel which crosses the project site in a north-to-south direction is designed to convey a 100-year storm flow of approximately 2,200 cfs.[6]

3) An underground storm drainage system, shown in blue on Figure 3-1, conveys runoff from the Makai portion of the Kehalani Project District to the Waiale Park / Detention Basin located at the corner of Olomea Street and Waiale Road. This basin, in turn, drains to the Wailuku River through a 1.2 mile long pipeline located downstream of the basin.

Onsite Flows

The undeveloped 14.4-acre project site generates storm runoff at a 10-year peak flow rate of approximately 15 cubic feet per second (cfs)[7]. Runoff drains in

---

fed by watersheds measuring many square miles in area. FEMA acknowledges this fact in the "Notes to Users" appearing of the face of its Flood Insurance Maps, which states:

> *"This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size..."*

[6] Ref. Warren S. Unemori Engineering, Inc., "Drainage Report for Kehalani Offsite Drainage System - Phase I", January 2004.

[7] See Pre-Development runoff calculation in Appendix A-2.

three directions as depicted on Figure 3-2 at the peak flow rates summarized below in Table 3-1.

TABLE 3-1

Pre-Development Drainage Summary
Onsite Flows for 10 yr/1hr Storm

Receiving Facility	Approx. Area Draining to Receiving Facility	Pre-Development Peak Runoff
Kehalani Waiale Drainage Basin	8.2 Ac.	7.9 cfs
Kehalani Waikapu Drainage Basin	4.4 Ac.	5.0 cfs
A&B Waiale Irrigation Reservoir	1.8 Ac.	1.7 cfs
Total	14.4 Ac.	14.6 cfs

3.2 Drainage Plan

3.2.1 Projected Increase in Onsite Runoff Due to Development

Once developed, the 14-acre project is expected to generate an onsite 10-year peak storm flow of 34 cfs -- a 19 cfs increase over its existing, undeveloped condition.[8] Runoff will drain in three directions as indicated on Figure 3-3 at the peak flow rates noted in Table 3-2.

[8] See Post-Development runoff calculation in Appendix A-3.

TABLE 3-2

Post-Development Drainage Summary
Onsite Flows for 10 yr/1hr Storm

Receiving Facility	Approx. Area Draining to Receiving Facility	Pre-Development Peak Runoff	Post-Development Peak Runoff	Net Change from Pre-Development Condition at Project Boundary	Net Change from Pre-Development Condition Downstream of Basin
Kehalani Waiale Drainage Basin	10.7 Ac.	7.9 cfs	29.7 cfs	+21.8 cfs	0.0 cfs
Kehalani Waikapu Drainage Basin	1.9 Ac.	5.0 cfs	2.3 cfs	-2.7 cfs	0.0 cfs
A&B Waiale Irrigation Reservoir	1.8 Ac.	1.7 cfs	1.7 cfs	0.0 cfs	0.0 cfs
Total	14.4 Ac.	14.6 cfs	33.7 cfs	+19.1 cfs	0.0 cfs

3.2.2 Proposed Improvements

The project site will be generally be graded so as to maintain the natural form of the mountainside and the drainage pattern that now exists. A conventional urban-type storm drainage system consisting of drainage inlets and underground pipes will be installed throughout the development to collect the runoff shed by rooftops and pavements and convey it to the northeast corner of the site where it will be discharged into the pre-designated connection point at the storm drain

mainline on Kuikahi Drive[9]. This drainline will, in turn, convey the runoff to Kehalani's Waiale Drainage Basin for disposal. (See Figure 3-4)

The potential flooding hazard posed by the under-sized existing natural drainage channel along the southern boundary of the project site will be mitigated by either: 1) improving the drainage channel to increase its capacity, or 2) constructing an earthen levee or concrete flood barrier (wall) between the channel and the apartment complex to confine storm flows to the gully.

3.2.3 Post-Development Condition

Peak Flow Mitigation

The entire increase in peak storm runoff attributable to development of the project site will be directed to the Waiale Detention basin which, having already been designed and constructed to accommodate the post-development runoff from TMK 3-5-001: 064 (the Wailuku Apartments project site)[10], will fully mitigate this increase in peak flow. Flows to Kehalani's Waikapu Retention Basin and A&B's Waiale Reservoir will either decrease or remain unchanged and therefore require no additional action by the project.

---

[9] The portion of the Kuikahi Drive storm drainage system into which the project site discharges will be installed as part of the street frontage improvements for the Kehalani Village Center scheduled for construction later this year.

[10] Ref. Warren S. Unemori Engineering, Inc., "Wailuku Project District Drainage Master Plan," February 1998.

Stormwater Treatment

Stormwater treatment now required by the Maui County Department of Public Works[11] will be provided in the following manner.

Onsite runoff conveyed to Kehalani's Waikapu Retention Basin and A&B's Waiale Reservoir will receive "detention-based" treatment by being held in those receiving facilities for at least 48 hours.

Onsite runoff sent to Kehalani's Waiale Detention Basin will receive "flow-through" treatment by passing through a hydrodynamic separator[12] installed on the project site before it enters the storm drainage system at Kuikahi Drive.

---

[11] Ref. Maui County Dept. of Public Works, Title MC-15, Subtitle 01, Chapter 111, "Rules for the Design of Stormwater Treatment Best Management Practices."

[12] A hydrodynamic separator is a type of prefabricated filtration device capable of removing pollutants from stormwater to the degree required by County stormwater quality regulations.

TRUE NORTH

SCALE: 1 IN. = 1200 FT.

WAILUKU HEIGHTS SUBDIVISION

Ext'g. Gullies

OLD WAIKAPU ROAD

KUIKAHI DRIVE

KEHALANI

PARK SITE

SCHOOL SITE

PARK SITE

WAILUKU

WAILUKU TOWN

WAIKAPU

PROJECT SITE

HONOAPIILANI HIGHWAY

10'x12' CONSPAN

8'x16' CONSPAN

OPEN CHANNEL

21'-6"x12'x11" PIPE ARCH

OPEN CHANNEL

KEHALANI VILLAGE CENTER

STREAM

WAIKAPU GARDENS SUBDIVISION

WAIALE DRIVE EXTENSION

WAIALE DRIVE

WAIKAPU ROAD

OPEN CHANNEL

OLD COUNTY LANDFILL (CLOSED)

EMERGENCY OVERFLOW CHANNEL TO WAIKAPU STREAM

WAIKAPU RETENTION BASIN

KUIKAHI DRIVE

Dry Overflow Basin

WAIALE RESERVOIR

Ext'g. Pond

WAINU STREET

WAIALE DETENTION BASIN

MILLYARD

RIVER

KAHIK

PARKWAY

GOLF COURSE

GOLF COURSE

MAUI LANI PARKWAY

ONEHEE AVENUE

MAUI LANI

GOLF COURSE

GOLF COURSE

MAHALANI STREET

AVENUE

KAISER CLINIC

MAUI MEMORIAL MEDICAL CENTER

BALDWIN HIGH SCHOOL

MAUI WAR MEMORIAL COMPLEX

LOWER MAIN

WAIKO ROAD

SCHOOL

V:\Proldata\16pro\16052\dwg\exhibits\Engineering Report\Figure 3-1-Drainage Overview-00.dwg

FIGURE 3-1

Regional Drainage Overview

Approx. 4.4 Acres Draining to
Kehalani's Waikapu Drainage Basin

TRUE NORTH
SCALE: 1 IN. = 140 FT.

HONOAPIILANI HIGHWAY

APPROXIMATE 100-YEAR STORM FLOW LIMITS

Approx. 1.8 Acres Draining to
A&B's Waiale Irrigation Reservoir

Approx. 8.2 Acres Draining to
Kehalani Waiale Drainage Basin

KUIKAHI DRIVE

WAIALE ROAD

FIGURE 3-2
Existing Drainage Condition

V:\Proidata\16proi\16052\dwg\exhibits\Engineering Report\Figure 3-2-exta condition-00.dwg

Approx. 1.9 Acres Draining to
Kehalani's Waikapu Drainage Basin

TRUE NORTH
SCALE: 1 IN. = 140 FT.

HONOAPIILANI HIGHWAY

Approx. 1.8 Acres Draining to
A&B's Waiale Irrigation Reservoir

Approx. 10.7 Acres Draining to
Kehalani's Waiale Drainage Basin

KUIKAHI DRIVE

WAIALE ROAD

V:\Proidata\16proj\16052\dwg\exhibits\Engineering Report\Figure 3-3-post condition-00.dwg

FIGURE 3-3
Post-Development
Drainage Condition

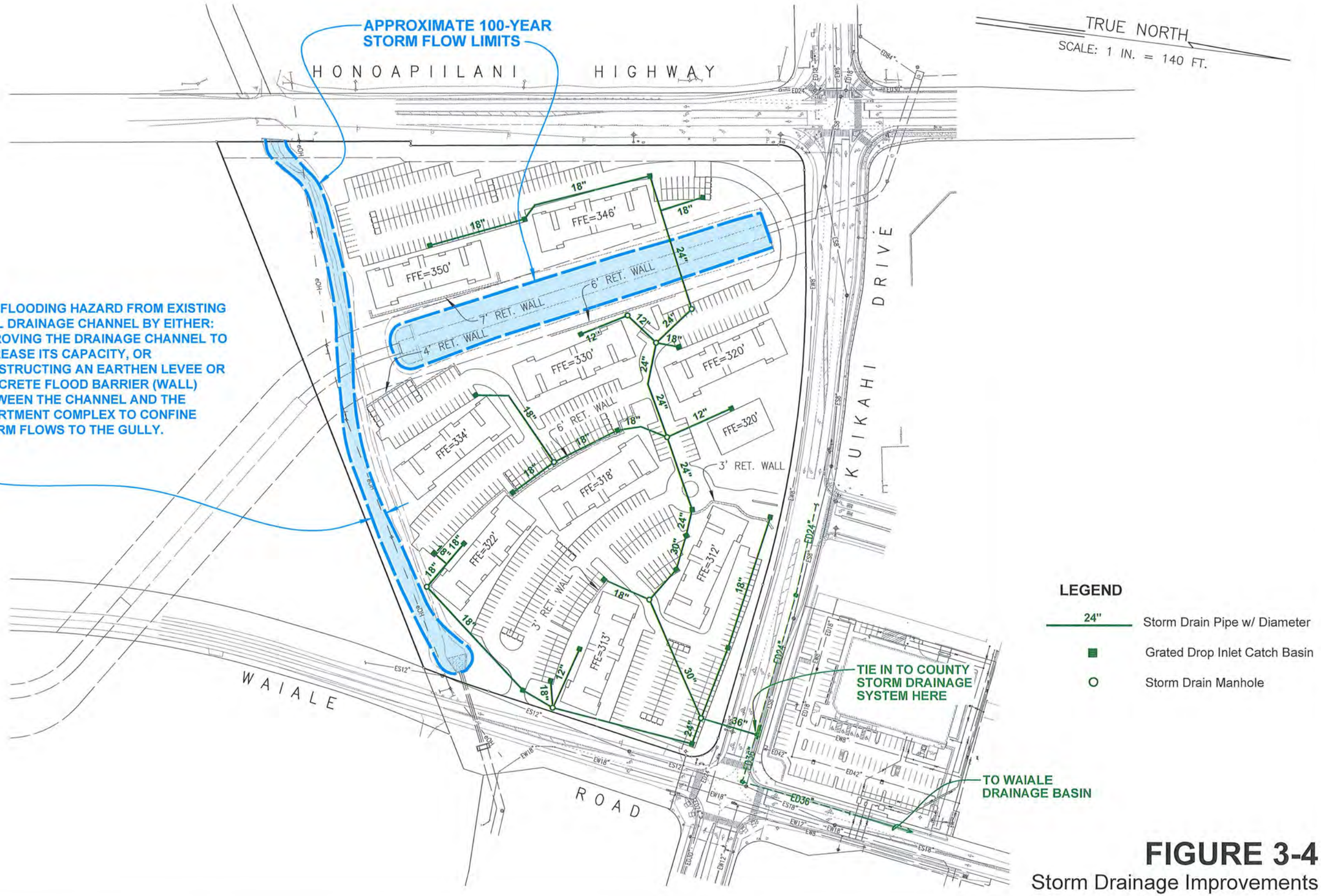


FIGURE 3-4
Storm Drainage Improvements

V:\Proidata\16proi\16052\dwg\exhibits\Engineering Report\Figure 3-4-Storm Drain-00.dwg

4. WATER

Potable water for drinking and fire protection will be supplied to the Wailuku Apartments project by the Maui County Department of Water Supply (DWS) from its Central Maui water system.

4.1 Demand

4.1.1 Domestic Consumption

The proposed apartment complex is expected to consume an average 189,000 gallons per day (gpd) of potable water.[13]

4.1.2 Fire Protection

A fire flow of 2,000 gallons per minute (gpm) sustainable for 2 hours is required to protect the apartment buildings within the development.[14]

4.2 Existing Infrastructure and Needed Improvements

4.2.1 Water Source

The water sources from which the Dept. of Water Supply will use to supply the project site include groundwater wells located in Wailuku and Waikapu that

---

[13] See Appendix B for potable water demand calculation.

[14] Required fire flow specified for A-2 Apartment District by Maui County Code Section 14.05.090.D (Fire Protection) and Maui County Department of Water Supply *Water System Standards*, 2002, Table 100-19, p.111-4.

draw water from the Iao Aquifer, and treated surface water diverted from Iao Valley. No source improvements are proposed by the Wailuku Apartments project.

4.2.2 Storage Reservoir

The project site will be supplied from the Dept. of Water Supply's existing 3.0 million gallon (MG) capacity Iao Tank, which is located along Alu Road at an elevation of 506 feet. The 3.0MG capacity of this tank exceeds the minimum 240,000 gallons required for fire protection[15] and will provide ample water pressure to the project site.[16] No storage improvements are proposed by the Wailuku Apartments project.

4.2.3 Distribution System

The County water distribution system nearest the Wailuku Apartments site is comprised of an existing pipe network whose backbone consists of 16- and 12-inch diameter mainlines.

Wailuku Apartments will install a 12-inch diameter water main extension -- the size needed to deliver the requisite 2,000 gpm fire flow -- from the end of the

---

[15] Required minimum reservoir storage capacity for fire protection = 2,000 gpm fire flow x 2 hours = 240,000 gallons.

[16] Static water pressures across the site will range from 63 psi at the highest point on the site near Honoapiilani Highway to 87 psi at its lowest point near Waiale Road.

existing 12-inch distribution main located within the intersection of Kuikahi Drive and Waiale Road to the project site. The location of the proposed connection point and main extension are depicted on Figure 4-1.

A single 12-inch diameter combined service lateral will then be extended into the project site from the 12-inch water main extension to provide both fire protection and drinking water to the building complex as shown in Figure 4-1.

TRUE NORTH

SCALE: 1 IN. = 140 FT.

HONOAPIILANI HIGHWAY

KUIKAHI DRIVE

WAIALE ROAD

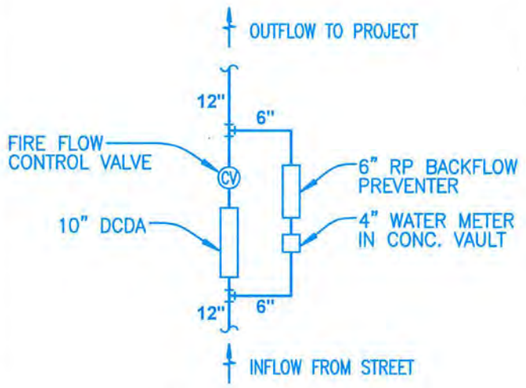
DWS TYPE C SERVICE LATERAL FOR 1.5" IRRIGATION METER

SEE METER SCHEMATIC AT LEFT

TIE-IN TO COUNTY WATER SYSTEM HERE

LEGEND

12"	Water Main w/ Diameter
D	Domestic Service Lateral
FS	Fire Sprinkler Lateral
FH	6" Fire Hydrant
FDC	Fire Dept. Connection Monument



METER SCHEMATIC

NOT TO SCALE

FIGURE 4-1

Potable Water Improvements

V:\Proidata\16pro\16052\dwg\exhibits\Engineering Report\Figure 4-1-Potable Water-00.dwg

5. WASTEWATER

5.1 Projected Demand

The proposed apartment complex is expected to contribute an average 83,000 gallons per day (gpd) into the County sewerage system.[17]

5.2 Existing Infrastructure and Needed Improvements

The Maui County Department of Environmental Management's Wastewater Reclamation Division operates the public sewerage system that collects wastewater from the Wailuku-Kahului area and conveys it to the County's Kahului Wastewater Treatment facility for processing and disposal.

The Wailuku Apartments project will install a conventional gravity sewer extension as shown on Figure 5-1 that will collect wastewater generated by the buildings and convey it via an 8-inch sewer service lateral connection to the existing County 12-inch diameter gravity sewer main located within Waiale Road.

---

[17] See Appendix C for wastewater demand calculation.

TRUE NORTH

SCALE: 1 IN. = 140 FT.

HONOAPIILANI HIGHWAY

KUIKAHI DRIVE

WAIALE ROAD

8"

PROPERTY LINE SEWER MANHOLE

TIE IN TO COUNTY SEWER SYSTEM HERE

LEGEND

- 8" — Sanitary Sewer Main w/ Diameter
- 6" Sewer Service Lateral
- Sewer Manhole

FIGURE 5-1

Sanitary Sewer Improvements

V:\Projdata\16proj\16052\dwg\exhibits\Engineering Report\Figure 5-1-Sanitary Sewer-00.dwg

6. POWER AND TELECOMMUNICATIONS

6.1 Existing Infrastructure and Needed Improvements

Regulated electric power, telephone and cable television services for the Wailuku Apartments will be provided through service arrangements with Maui Electric Company, Hawaiian Telcom and/or Oceanic Time Warner Cable which currently serve the area in which the project is located. Existing overhead utility lines are present on Honoapiilani Highway, Waiale Road and the southern edge of the project parcel.

Utility services to the individual buildings will be provided via underground service extensions from the overhead distribution system present along Waiale Road.

The project driveway entrances on Kuikahi Drive and Waiale Road will be safely illuminated using private, pole-mounted light fixtures conforming to both Maui County's Street Lighting Ordinance[18] and Dept. of Public Works' lighting requirements.[19] This will make it unnecessary to install separate underground powerlines within the Kuikahi Drive and Waiale Road rights-of-way to power standard County street lights installed at these same locations.

The existing utility pole shown in Figure 2-1 on the mauka (west) side of Waiale Road will need to be relocated out of the way of the pavement widening for the left turn lane at the East project driveway.

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[18] Maui County Code, Chapter 20.35 - Outdoor Lighting.

[19] Maui County Department of Public Works, "Street Lighting Standards", Title MC-15, Chapter 901, Effective March 23, 2000.

7. TEMPORARY CONSTRUCTION BEST MANAGEMENT PRACTICES

7.1 Site Specific Control Measures

The project will utilize a variety of Temporary Construction Best Management Practices (BMPs) to control the dust and sediment generated by its construction activities. All temporary Construction BMPs will be subject to periodic inspection and regular maintenance as required by the County-issued Grading Permit and State-issued NPDES Permit.

Dust Control

A dust fence will be installed along the outer perimeter of the work area to minimize the adjoining roadways' and neighboring businesses' exposure to construction site dust. Additionally, exposed areas will be thoroughly watered by sprinklers and water trucks on a daily basis.

Sediment Control

Sediment ponds will be relied upon to capture a majority of the project site's stormwater runoff and prevent sediment-laden runoff from entering the existing open drainage channels or underground storm drainage system. Residual runoff will be treated by installing silt fencing along the outer boundary of the construction site and filters on nearby drain inlets. The site's construction entrance/exit will also be outfitted with a tire

cleaning pad to prevent sediment from being tracked onto the roadways by construction vehicles and equipment.

APPENDIX A

Drainage Calculations

APPENDIX A-1

DLNR Flood Hazard Assessment Report for TMK 3-5-001: 064



Flood Hazard Assessment Report

www.hawaiinfip.org

Property Information

COUNTY:	MAUI
TMK NO:	(2) 3-5-001:064
WATERSHED:	IAO
PARCEL ADDRESS:	0 HONOAPIILANI HWY WAILUKU, HI 96793

Notes:

Flood Hazard Information

FIRM INDEX DATE:	NOVEMBER 04, 2015
LETTER OF MAP CHANGE(S):	NONE
FEMA FIRM PANEL:	1500030391E
PANEL EFFECTIVE DATE:	SEPTEMBER 25, 2009

THIS PROPERTY IS WITHIN A TSUNAMI EVACUTION ZONE: NO
FOR MORE INFO, VISIT: http://www.scd.hawaii.gov/

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: YES (MA-0151)
FOR MORE INFO, VISIT: http://dlnreng.hawaii.gov/dam/

0 400 800 ft

Disclaimer: The Hawaii Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

If this map has been identified as 'PRELIMINARY', please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.

FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND
(Note: legend does not correspond with NFHL)

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - The 1% annual chance flood (100-year), also know as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

	Zone A: No BFE determined.
	Zone AE: BFE determined.
	Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
	Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
	Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.
	Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.
	Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

	Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
	Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

	Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities.

APPENDIX A-2

Pre-Development Storm Runoff (10-yr./1-hr.)

Warren S. Unemori Engineering, Inc.
Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/25/2017

Area

Description: Pre-development surface runoff draining to Kehalani Waiale Drainage Basin

Area (A): 8.2 acres

Runoff Coefficient

Infiltration:	[Medium]	→	0.07
Relief:	[Rolling]	→	0.03
Vegetal Cover:	[Good]	→	0.03
Development:	[Agricultural]	→	0.15
	Composite Runoff Coefficient:		0.28

Time of Concentration

Runoff Length:	800 ft.
Start Elevation:	340 ft. M.S.L.
End Elevation:	305 ft. M.S.L.
Average Slope:	4.4 %
Time of Concentration (T_c):	18.5 minutes

Intensity

Project Location:	Wailuku, Maui, Hawaii
Design Storm:	10-year recurrence interval, 1-hour duration
Rainfall Depth:	2.0 in.
Intensity (I):	3.42 in./hr.

Flow Rate

$Q = C \cdot I \cdot A$

$= 7.9 \text{ ft.}^3/\text{sec.}$

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Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/25/2017

Area

Description: Pre-development surface runoff draining to Kehalani Waikapu Drainage Basin

Area (A): 4.4 acres

Runoff Coefficient

Infiltration:	[Medium]	→	0.07
Relief:	[Rolling]	→	0.03
Vegetal Cover:	[Good]	→	0.03
Development:	[Agricultural]	→	0.15
	Composite Runoff Coefficient:		0.28

Time of Concentration

Runoff Length:	250 ft.
Start Elevation:	360 ft. M.S.L.
End Elevation:	340 ft. M.S.L.
Average Slope:	8.0 %
Time of Concentration (T_c):	10.5 minutes

Intensity

Project Location:	Wailuku, Maui, Hawaii
Design Storm:	10-year recurrence interval, 1-hour duration
Rainfall Depth:	2.0 in.
Intensity (I):	4.06 in./hr.

Flow Rate

$Q = C \cdot I \cdot A$

$= 5.0$ $ft.^3/sec.$

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Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/25/2017

Area

Description: Pre-development surface runoff draining to A&B Waiale Irrigation Reservoir

Area (A): 1.8 acres

Runoff Coefficient

Infiltration:	[Medium]	→	0.07
Relief:	[Rolling]	→	0.03
Vegetal Cover:	[Good]	→	0.03
Development:	[Agricultural]	→	0.15
	Composite Runoff Coefficient:		0.28

Time of Concentration

Runoff Length:	910 ft.
Start Elevation:	365 ft. M.S.L.
End Elevation:	312 ft. M.S.L.
Average Slope:	5.8 %
Time of Concentration (T_c):	18.5 minutes

Intensity

Project Location:	Wailuku, Maui, Hawaii
Design Storm:	10-year recurrence interval, 1-hour duration
Rainfall Depth:	2.0 in.
Intensity (I):	3.42 in./hr.

Flow Rate

$Q = C \cdot I \cdot A$

$= 1.7$ $ft.^3/sec.$

APPENDIX A-3

Post-Development Storm Runoff (10-yr/1-hr.)

Warren S. Unemori Engineering, Inc.
Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/25/2017

Area

Description: Post-development surface runoff draining to Kehalani Waiale Drainage Basin

Area (A):	10.7	acres
Impervious Area:	6.7	acres

Runoff Coefficient

Lawn Runoff Coefficient:	0.22
Impervious Runoff Coefficient:	0.95
Weighted Runoff Coefficient (C):	0.68

Time of Concentration

Time of Concentration (T_c): 10 minutes

Intensity

Project Location:	Wailuku, Maui, Hawaii
Design Storm:	10-year recurrence interval, 1-hour duration
Rainfall Depth:	2.0 in.
Intensity (I):	4.10 in./hr.

Flow Rate

$Q = C \cdot I \cdot A$

$= 29.7$ $ft.^3/sec.$

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Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/25/2017

Area

Description: Post-development surface runoff draining to Kehalani Waikapu Drainage Basin

Area (A):	1.9	acres
Impervious Area:	0.3	acres
Channel Area:	1.1	acres

Runoff Coefficient

Lawn Runoff Coefficient:	0.22
Impervious Runoff Coefficient:	0.95
Channel Runoff Coefficient:	0.30
Composite Runoff Coefficient (C):	0.38

Time of Concentration

Runoff Length:	600	ft.
Start Elevation:	340	ft. M.S.L.
End Elevation:	322	ft. M.S.L.
Average Slope:	3.0	%
Time of Concentration (T_c):	23.5	minutes

Intensity

Project Location:	Wailuku, Maui, Hawaii
Design Storm:	10-year recurrence interval, 1-hour duration
Rainfall Depth:	2.0 in.
Intensity (I):	3.13 in./hr.

Flow Rate

$$Q = C \cdot I \cdot A$$
$$= 2.3 \text{ ft.}^3/\text{sec.}$$

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Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Surface Runoff

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/25/2017

Area

Description: Post-development surface runoff draining to A&B Waiale Irrigation Reservoir

Area (A): 1.8 acres

Runoff Coefficient

Infiltration:	[Medium]	→	0.07
Relief:	[Rolling]	→	0.03
Vegetal Cover:	[Good]	→	0.03
Development:	[Agricultural]	→	0.15
	Composite Runoff Coefficient:		0.28

Time of Concentration

Runoff Length:	910 ft.
Start Elevation:	365 ft. M.S.L.
End Elevation:	312 ft. M.S.L.
Average Slope:	5.8 %
Time of Concentration (T_c):	18.5 minutes

Intensity

Project Location:	Wailuku, Maui, Hawaii
Design Storm:	10-year recurrence interval, 1-hour duration
Rainfall Depth:	2.0 in.
Intensity (I):	3.42 in./hr.

Flow Rate

$Q = C \cdot I \cdot A$

$= 1.7$ $ft.^3/sec.$

APPENDIX A-4

Minimum 48 hr. Retention Capacity Needed to Meet Maui County Stormwater Quality Requirements

Table A-4.1

Minimum 48 hr. Retention Capacity Needed to Meet Maui County Stormwater Quality Requirements

Receiving Facility	Approx. Area Draining to Receiving Facility	Minimum 48 hr. Retention Volume Development Peak Runoff
Kehalani Waiale Drainage Basin	10.7 Ac.	24,080 cu.ft.
Kehalani Waikapu Drainage Basin	1.9 Ac.	1,310 cu.ft.
A&B Waiale Irrigation Reservoir	1.8 Ac.	330 cu.ft.
Total	14.4 Ac.	25,720 cu.ft.

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Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Storm Water Treatment

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/26/2017

Purpose: To determine the required Kehalani Waiale Drainage Basin volume to meet the County of Maui, Department of Public Works' "Rules for the Design of Storm Water Treatment Best Management Practices"

Calculations: The required design volume for detention based control is computed by the MCC §15-111-5.a.1.C formula:

$$WQDV = C \cdot 1'' \cdot A \cdot 3630$$

where, WQDV = water quality design volume in cubic feet
C = EPA volumetric runoff coefficient
A = gross area of the site in acres = 10.7 ac.
1" = design storm for detention based water quality system
3630 = conversion factor

The EPA volumetric runoff coefficient, C, calculated from the formula given in MCC §15-111-5.a.1.A is:

$$C = 0.05 + (0.009) \cdot (IMP)$$

where, IMP = percentage of impervious area
= (impervious area) / (gross area) · 100
= (6.7 ac.) / (10.7 ac.) · 100
= 63

Since IMP = 63, the value of C is:

$$C = 0.05 + (0.009) \cdot (63)$$
$$= 0.62$$

Compute the required design volume for a 1" storm with C = 0.62:

$$WQDV = C \cdot 1'' \cdot A \cdot 3630$$
$$= 0.62 \cdot 1'' \cdot 10.7 \cdot 3630$$
$$= 24{,}080 \text{ ft}^3$$

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Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Storm Water Treatment

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/26/2017

Purpose: To determine the required Kehalani Waikapu Drainage Basin volume to meet the County of Maui, Department of Public Works' "Rules for the Design of Storm Water Treatment Best Management Practices"

Calculations: The required design volume for detention based control is computed by the MCC §15-111-5.a.1.C formula:

$$WQDV = C \cdot 1" \cdot A \cdot 3630$$

where, WQDV = water quality design volume in cubic feet
C = EPA volumetric runoff coefficient
A = gross area of the site in acres = 1.9 ac.
1" = design storm for detention based water quality system
3630 = conversion factor

The EPA volumetric runoff coefficient, C, calculated from the formula given in MCC §15-111-5.a.1.A is:

$$C = 0.05 + (0.009) \cdot (IMP)$$

where, IMP = percentage of impervious area
= (impervious area) / (gross area) · 100
= (0.3 ac.) / (1.9 ac.) · 100
= 16

Since IMP = 16, the value of C is:

$$C = 0.05 + (0.009) \cdot (16)$$
$$= 0.19$$

Compute the required design volume for a 1" storm with C = 0.19:

$$WQDV = C \cdot 1" \cdot A \cdot 3630$$
$$= 0.19 \cdot 1" \cdot 1.9 \cdot 3630$$
$$= 1{,}310 \text{ ft}^3$$

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Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Storm Water Treatment

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/26/2017

Purpose: To determine the required A&B Waiale Irrigation Reservoir volume to meet the County of Maui, Department of Public Works' "Rules for the Design of Storm Water Treatment Best Management Practices"

Calculations: The required design volume for detention based control is computed by the MCC §15-111-5.a.1.C formula:

$$WQDV = C \cdot 1" \cdot A \cdot 3630$$

where, WQDV = water quality design volume in cubic feet
C = EPA volumetric runoff coefficient
A = gross area of the site in acres = 1.8 ac.
1" = design storm for detention based water quality system
3630 = conversion factor

The EPA volumetric runoff coefficient, C, calculated from the formula given in MCC §15-111-5.a.1.A is:

$$C = 0.05 + (0.009) \cdot (IMP)$$

where, IMP = percentage of impervious area
= (impervious area) / (gross area) · 100
= (0 ac.) / (1.8 ac.) · 100
= 0

Since IMP = 0, the value of C is:

$$C = 0.05 + (0.009) \cdot (0)$$
$$= 0.05$$

Compute the required design volume for a 1" storm with C = 0.05:

$$WQDV = C \cdot 1" \cdot A \cdot 3630$$
$$= 0.05 \cdot 1" \cdot 1.8 \cdot 3630$$
$$= 330 \text{ ft}^3$$

APPENDIX A-5

Minimum Treated Flow Rate to Meet Maui County
Stormwater Quality Requirements

Warren S. Unemori Engineering, Inc.
Civil & Structural Engineers · Land Surveyors
Wells Street Professional Center
2145 Wells Street, Suite 403
Wailuku, Maui, HI 96793

HYDROLOGIC CALCULATIONS - Storm Water Treatment

Project Name: Wailuku 201H Residential Development
Project No.: 16052
Engineer: Derek T. Ono
Date: 4/26/2017

Purpose: To determine the required flow rate for treatment at the Kehalani Waiale Drainage Basin to meet the County of Maui, Department of Public Works' "Rules for the Design of Storm Water Treatment Best Management Practices"

Calculations: The required design flow rate for flow-through treatment is computed by the MCC §15-111-5.b.1.C formula:

$$WQFR = C \cdot 0.4" \cdot A$$

where, WQFR = water quality flow rate in cubic feet per second
C = runoff coefficient
A = gross area of the site in acres = 10.7 ac.
0.4" = design storm for flow-through water quality system

Compute the required design flow rate:

$$WQFR = C \cdot 0.4" \cdot A$$
$$= 0.68 \cdot 0.4" \cdot 10.7$$
$$= 2.9 \text{ ft}^3/\text{sec.}$$

APPENDIX B

Potable Water Demand Calculations

WAILUKU APARTMENTS
Projected Daily Water Demand

	Base Unit		Consumption Rate[1]		Average Daily Demand			Max. Daily Demand
Multi-Family Apartments	324 units	x	560 gals/unit	==>	181,440 gpd	x 1.5	==>	272,160 gpd
Leasing Office / Rec. Bldg	5,000 s.f.	x	140 gals/1000 s.f.	==>	700 gpd	x 1.5	==>	1,050 gpd
Landscape Irrigation	4 Ac.	x	1,700 gals/Ac.	==>	6,800 gpd	x 1.5	==>	10,200 gpd
Total					188,940 gpd			283,410 gpd

Notes:

[1] Consumption rates taken from Water System Standards, Department of Water Supply County of Maui, State of Hawaii, 2002, Table 100-18, p. 111-3.

APPENDIX C

Wastewater Demand Calculations

WAILUKU APARTMENTS
Projected Daily Sewer Demand

	Base Unit		Contribution Rate[1]		Average Daily Sewer Demand
Multi-Family Apartments	324 units	x	255 gals/unit/day	==>	82,620 gpd
Leasing Office / Rec. Bldg	2 employees	x	20 gals/capita/day	==>	40 gpd
Total					82,660 gpd

Note:
[1] Contribution rates taken from County of Maui, Wastewater Reclamation Division, "Wastewater Flow Standards,"

APPENDIX C

BIOLOGICAL RESOURCES SURVEY

BIOLOGICAL RESOURCES SURVEY

for the

KEHALANI 201-H AFFORDABLE HOUSING PROJECT

WAILUKU, MAUI, HAWAII

by

ROBERT W. HOBDY
ENVIRONMENTAL CONSULTANT
Kokomo, Maui
February 2017

Prepared for:
Pier Management Hawaii, LLC

FLORA AND FAUNA SURVEY
KEHALANI 201-H AFFORDABLE HOUSING PROJECT
WAILUKU, MAUI, HAWAII

INTRODUCTION

The Kehalani 201-H Affordable Housing project consists of 14.416 acres located between Wailuku and Waikapu in central Maui. It lies between Honoapiilani Highway and Waiale Road, adjacent to the south edge of East Kuikahi Drive, TMK (2) 3-5-01:064, (see Figures 1 & 2). This biological resources study was initiated by the owners in fulfillment of environmental requirements of the planning process.

SITE DESCRIPTION

The project area lies on gently sloping land on the lower eastern slopes of the West Maui Mountains. The vegetation consists of dense grassland with scattered shrubs and small trees. Elevations range between 320 and 380 feet above sea level. The soils are characterized as Iao silty clay, 0 – 3% slopes (IaA,), and Iao clay, 3 – 7% slopes (IcB), which are deep, dark brown alluvial soils (Foote et al, 1972). Rainfall averages 20 inches per year with winter maximums.

BIOLOGICAL HISTORY

The original vegetation in this area consisted of a dense low statured native forest and shrubland with such components as ʻōhiʻa (*Metrosideros polymorpha*), ʻaʻaliʻi (*Dodonaea viscosa*), olopua (*Nestegis sandwicensis*), lama (*Diospyros sandwicensis*), halapepe (*Chrysodracon auwahiensis*), and a variety of ferns, vines and herbaceous plants.

Hawaiians lived in the area for several centuries, farming in the valley bottoms and lowlands and utilizing forest plants for food, construction materials, tools, fiber and medicines. They altered the landscape somewhat through cultivation and burning. This area is situated on farming lands that were irrigated with waters from the ancient Kama Ditch.

During the mid-1800's this area was cleared for sugar cane agriculture and the area was plowed, planted, burned and harvested in continuous cycles for over 100 years. Native ecosystems were replaced by sugar cane and increasing numbers of agricultural weeds.

When sugar production here ended in the 1990s this area became fallow. All of these practices have resulted in an environment that is now nearly totally lacking in native plants and animal species.

SURVEY OBJECTIVES

This report summarizes the findings of a flora and fauna survey of the proposed Kehalani 201-H Affordable Housing project which was conducted in February 2017. The objectives of the survey were to:

1. Document what plant, and animal 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.

BOTANICAL SURVEY REPORT

SURVEY METHODS

A walk-through botanical survey method was used covering the entire project area. Notes were made on plant species, distribution and abundance as well as on terrain and substrate.

A special focus was made to identify any native plants and ascertain if there were any Endangered or Threatened species (USFWS, 2017) that would require special focus. A complete plant species list is presented herein.

DESCRIPTION OF THE VEGETATION

The vegetation within the project area was dominated by two non-native species, Guinea grass (*Megathyrsus maximus*) and glycine (*Neontonia wightii*). These two species form a tall dense grassland that is smothered by a tangle of vines. Also common were koa haole (*Leucaena leucocephala*) and Castor bean (*Ricinus communis*).

A total of 63 plant species were recorded during two site visits to the project area. Four of these were common native plant species, ʻuhaloa (*Waltheria indica*), kou (*Cordia subcordata*), (*Cyperus polystachyos*) no common name, and koali kua hulu (*Merremia aegyptia*) which are all widespread in Hawaii as well as in many other tropical countries. The remaining 59 species were non-native grasses or agricultural weeds.

DISCUSSION AND RECOMMENDATIONS

The vegetation throughout the project area is dominated by non-native species that are of no particular environmental interest or concern. Just four common indigenous plants, ʻuhaloa, kou, koali kua hulu and (*Cyperus polystachyos*) were found. No federally listed Endangered or Threatened plant species (USFWS, 2017) were found, nor do any plants that are candidates for such status occur on the project area. No special plant habitats occur on or near the project and no potential wetlands occur in this dry upland site.

This project is not expected to have any significant negative impacts on the botanical resources in this part of Central Maui. No recommendations regarding botanical resources are deemed necessary or appropriate.

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).

   Polynesian = all those plants brought to Hawaii during the course of Polynesian migrations

   non-native = all those plants brought to the islands intentionally or accidentally after western contact.

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.

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
MONOCOTS			
CYPERACEAE (Sedge Family)			
Cyperus polystachyos Rottb.	----------	indigenous	rare
Cyperus rotundus L.	nut sedge	non-native	rare
POACEAE (Grass Family)			
Cenchrus ciliaris L.	buffelgrass	non-native	rare
Cenchrus echinatus L.	common sandbur	non-native	rare
Chloris barbata (L.) Sw.	swollen fingergrass	non-native	uncommon
Cynodon dactylon (L.) Pers.	Bermuda grass	non-native	rare
Digitaria ciliaris (Retz.) Koeler	Henry's crabgrass	non-native	rare
Digitaria fuscescens (K. Presl) Henr.	creeping crabgrass	non-native	rare
Digitaria insularis (L.) Mez ex Ekman	sourgrass	non-native	rare
Eleusine indica (L.) Gaertn.	wiregrass	non-native	rare
Eragrostis amabilis (L.) Wight & Arnott	Japanese lovegrass	non-native	rare
Eragrostis pectinacea (Michx.) Nees	Carolina lovegrass	non-native	rare
Megathyrsus maximus (Jacq.) Simon & Jacobs	Guinea grass	non-native	abundant
Melinis repens (Willd.) Zizka	Natal redtop	non-native	rare
Saccharum officinarum L.	sugar cane	non-native	rare
DICOTS			
AMARANTHACEAE (Amaranth Family)			
Alternanthera pungens Kunth	khaki weed	non-native	rare
Amaranthus spinosus L.	spiny amaranth	non-native	uncommon
Amaranthus viridis L.	slender amaranth	non-native	rare
APOCYNACEAE (Dogbane Family)			
Asclepias physocarpa (E. Meyen) Schlect.	baloon plant	non-native	rare
Calotropis procera (Aiton) Aiton	small crown flower	non-native	rare
Plumeria rubra L.	plumeria	non-native	rare
ASTERACEAE (Sunflower Family)			
Bidens pilosa L.	Spanish needle	non-native	uncommon
Conyza bonariensis (L.) Cronq.	hairy horseweed	non-native	rare
Emilia fosbergii Nicolson	red pualele	non-native	rare
Senecio madagascariensis Poir.	fireweed	non-native	rare
Sonchus oleraceus L.	pualele	non-native	uncommon
Tridax procumbens L.	coat buttons	non-native	uncommon
Verbesina encelioides (Cav.) Benth. & Hook.	golden crown-beard	non-native	rare
BORAGINACEAE (Borage Family)			
Cordia subcordata Lam.	kou	indigenous	rare
Heliotropium procumbens Mill.	fourspike heliotrope	non-native	rare
BRASSICACEAE (Mustard Family)			
Lepidium virginicum L.	Virginia pepperwort	non-native	rare
CONVOLVULACEAE (Morning Glory Family)			
Ipomoea triloba L.	little bell	non-native	uncommon
Merremia aegyptia (L.) Urb.	hairy merremia	indigenous	rare

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
CUCURBITACEAE (Gourd Family)			
Cucumis dipsaceus Ehrenb. ex Spach	hedgehog gourd	non-native	rare
Momordica charantia L.	bitter melon	non-native	uncommon
EUPHORBIACEAE (Spurge Family)			
Euphorbia hirta L.	hairy spurge	non-native	rare
Euphorbia hypericifolia L.	graceful spurge	non-native	rare
Ricinus communis L.	Castor bean	non-native	common
FABACEAE (Pea Family)			
Chamaecrista nictitans (L.) Moench	partridge pea	non-native	rare
Crotalaria pallida Aiton	smooth rattlepod	non-native	uncommon
Crotalaria retusa L.	rattlepod	non-native	uncommon
Desmanthus pernambucanus (L.) Thellung	slender mimosa	non-native	rare
Desmodium tortuosum (Sw.) DC.	Florida beggarweed	non-native	uncommon
Indigofera spicata Forssk.	creeping indigo	non-native	rare
Indigofera suffruticosa Mill.	inikō	non-native	rare
Leucaena leucocephala (Lam.) de Wit	koa haole	non-native	common
Macroptilium atropurpureum (DC.) Urb.	siratro	non-native	uncommon
Neonotonia wightii (Wight & Arnott) Lackey	glycine	non-native	abundant
Pithecellobium dulce (Roxb.) Benth.	ōpiuma	non-native	uncommon
Samanea saman (Jacq.) Merr.	monkeypod	non-native	rare
Sesbania grandiflora (L.) Poir.	sesban	non-native	rare
LAMIACEAE (Mint Family)			
Leonotis nepetifolia (L.) R. Br.	lion's ear	non-native	rare
MALVACEAE (Mallow Family)			
Abutilon grandifolium (Willd.) Sweet	hairy abutilon	non-native	rare
Malva parviflora L.	cheese weed	non-native	rare
Malvastrum coromandelianum (L.) Garcke	false mallow	non-native	uncommon
Sida rhombifolia L.	arrowleaf sida	non-native	uncommon
Sida spinosa L.	prickly sida	non-native	rare
Waltheria indica L.	'uhaloa	indigenous	rare
MORINGACEAE (Drumstick Tree Family)			
Moringa oleifera Lamarck	marunggay, horeradish tree	non-native	uncommon
NYCTAGINACEAE (Four-o'clock Family)			
Boerhavia coccinea Mill.	scarlet spiderling	non-native	rare
SOLANACEAE (Nightshade Family)			
Solanum lycopersicum L.	cherry tomato	non-native	uncommon
Solanum torvum Sw.	pea aubergine	non-native	rare
VERBENACEAE (Verbena Family)			
Stachytarpheta jamaicensis (L.) Vahl	Jamaica vervain	non-native	rare

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 Hawaiian hoary bat (*Lasiurus cinereus semotus*) in the area.

RESULTS

MAMMALS

Just two non-native mammals the mongoose (*Herpestes auropunctatus*) and the axis deer (*Axis axis*) were observed during two site visits. Several common non-native mammal species, however, could be occasionally expected to utilize this habitat. These include cats (*Felis catus*), domestic dogs (*Canis familiaris*), rats (*Rattus* spp.) and mice (*Mus domesticus*). These species can be difficult to detect because of the dense vegetation. Taxonomy and nomenclature follow Tomich (1986).

A special effort was made to look for the native Hawaiian hoary bat by making an evening survey of the area. When present in an area these bats 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. In addition, a bat detecting device (Batbox IIID) was used at two locations, set to the frequency of 27,000 to 28,000 hertz which is the typical range within which these bats are known to echolocate for flying insect prey. No activity was detected using this device.

BIRDS

Birdlife was somewhat sparse within the project area due to the lack of habitat diversity. Just six species of non-native birds were recorded during two site visits. Taxonomy and nomenclature follow American Ornithologists' Union (2017). One species was common, the zebra dove (*Geopelia striata*). Three other species were uncommon, the common myna (*Acridotheres tristis*), the spotted dove (*Streptopelia chinensis*) and the nutmeg mannikin (*Lonchura punctulata*). Two other species were rare, the gray francolin (*Francolinus pondicerianus)* and the red-crested cardinal (*Paroaria coronata*).

A few other non-native bird species may occasionally occur in this habitat such as the northern cardinal (*Cardinalis cardinalis*), the Japanese white-eye (*Zosterops japonicus*), the house finch (*Carpodacus mexicanus*) and the chestnut mannikin (*Lonchura malacca*), but the habitat is unsuitable for Hawaii's native forest birds that are presently restricted to higher elevation native forests beyond the range of mosquitoes and the avian diseases they carry and transmit.

INSECTS

Insect life was moderate in both species diversity and in total numbers. Eighteen species were recorded during two site visits, representing seven insect Orders. Taxonomy and nomenclature follow Nishida et al (1992).

Two species were of common occurrence, the long-tailed blue butterfly (*Lampides boeticus*) and the large Sulphur butterfly (*Phoebis agarithe*). Eleven species were uncommon and four species were rare (see the insect inventory).

Just two native dragonfly species were observed, the green darner (*Anax junius*) and the globe skimmer (*Pantala flavescens*). These two dragonflies are both indigenous in Hawaii and common here, and both also naturally occur in other countries as well. The other 16 species were all non-native insects that are of no special conservation concern.

MOLLUSKS

Just one non-native mollusk species, the giant East African snail (*Achatina fulica*) was found during the survey.

DISCUSSION AND RECOMMENDATIONS

The wildlife within the project area were nearly all non-native species that have come into Hawaii either accidentally or as intentional introductions since first Western contact. The two indigenous dragonflies are both widespread and common in Hawaii and are rated as "of least concern" in conservation status.

No Endangered Hawaiian hoary bats were detected during the evening survey. These bats, however, are wide-ranging and are opportunistic in taking advantage of spikes in nocturnal insect populations wherever they may occur. They may utilize this project area occasionally or seasonally. These bats also breed and raise their young between the months of April and mid-September, and during that time they utilize trees larger than 15 feet in height to place their young when they are too immature to fly. The U.S. Fish and Wildlife service usually recommends not removing these larger trees during the breeding and pupping season to prevent potentially injuring or killing any juvenile bats.

No Endangered Blackburn's sphinx moths or their eggs or larvae were found during the survey and none of their specific obligate host plants were found growing in the project area either. As a result these moths are not currently likely to occur here and no specific recommendations are offered.

While no protected seabirds were found on the property, the Endangered ua'u (*Pterodrama sanwichensis*) and Threatened 'a'o (*Puffinus newelli*) are known to overfly the area at dawn and dusk to their burrows high in the mountains between the months of March and November. In late fall young birds fledge from their burrows to take their first tentative flights out to sea. These inexperienced birds are easily confused and distracted by bright lights and often crash to the ground where they are particularly vulnerable to being run over by vehicles or killed by predators.

It is recommended that any significant outdoor lighting such as street lights or flood lights that are incorporated into the project design be shielded to direct the light downward so that it is not visible from above.

As a result of these findings, it is determined that there is little of environmental concern with regard to animal life within the project area. With the above recommendations, the development of the project is not expected to have a significant negative effect on the native animal resources int his part of central Maui.

ANIMAL SPECIES LIST

Following is a checklist of the animal species inventoried during the field work. Animal species are arranged in descending abundance within three groups: Mammals, Birds, Insects and Mollusks. 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).

   non-native = all those animals brought to Hawaii intentionally or accidentally after western contact.

   migratory = spending a portion of the year in Hawaii and a portion elsewhere. In Hawaii the migratory birds are usually in the overwintering/non-breeding phase of their life cycle.

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.

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
MAMMALS			
Axis axis Erxleben	axis deer	non-native	rare
Herpestes auropunctatus Hodgson	mongoose	non-native	rare
BIRDS			
Geopelia striata L.	zebra dove	non-native	common
Acridotheres tristis L.	common myna	non-native	uncommon
Streptopelia chinensis Scopoli	spotted dove	non-native	uncommon
Lonchura punctulata L.	nutmeg mannikin	non-native	uncommon
Francolinus pondicerianus Gmelin	gray francolin	non-native	rare
Paroaria coronata Miller	red-crested cardinal	non-native	rare
MOLLUSKS			
Achatina fulica Bowdich	giant East African snail	non-native	rare

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
INSECTS			
Order ARANAE - true spiders			
ARANEIDAE (Orb Weaver Family)			
Araneus diadematus Clerck	European garden spider	non-native	rare
Order COLEOPTERA - beetles			
COCCINELLIDAE (Lady Beetle Family)			
Coccinella septempunctata brucki Multsant	seven-spot lady beetle	non-native	rare
SCARABAEIDAE (Scarab Beetle Family)			
Protaetia orientalis Burmeister	Asian flower beetle	non-native	uncommon
Order DIPTERA - flies			
MUSCIDAE (Housefly Family)			
Musca sorbens Wiedemann	dung fly	non-native	uncommon
SYRPHIDAE (Hoverfly Family)			
Ornidia obesa Fabricius	drone fly	non-native	rare
Order HYMENOPTERA - bees, wasps, ants			
APIDAE (Honey Bee Family)			
Apis mellifera L.	honeybee	non-native	uncommon
Xylocopa sonorina Smith	Sonoran carpenter bee	non-native	uncommon
FORMICIDAE (Ant Family)			
Pheidole megacephala Fabricius	big-headed ant	non-native	uncommon
Order LEPIDOPTERA - butterflies, moths			
CRAMBIDAE (Grass Moth Family)			
Spoladea recurvalis Fabricius	beet webworm moth	non-native	uncommon
LYCAENIDAE (Gossamer-winged Butterfly Family)			
Lampides boeticus L.	long-tailed blue butterfly	non-native	common
NOCTUIDAE (Owlet Moth Family)			
Melipotis indomita Walker	indomitable melipotis	non-native	rare
NYMPHALIDAE (Brush-footed Butterfly Family)			
Danaus plexippus L.	monarch butterfly	non-native	uncommon
PIERIDAE (White and Sulphur Butterfly Family)			
Eurema nicippe Cramer	sleepy orange butterfly	non-native	uncommon
Phoebis agarithe Boisduval	large sulphur butterfly	non-native	common
Pieris rapae L.	cabbage butterfly	non-native	uncommon
Order ODONATA - dragonflies, damselflies			
AESHNIDAE (Hawker Dragonfly Family)			
Anax junius Drury	green darner dragonfly	indigenous	uncommon
LIBELLULIDAE (Skimmer Dragonfly Family)			
Pantala flavescens Fabricius	globe skimmer dragonfly	indigenous	uncommon

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
Order ORTHOPTERA - grasshoppers, crickets			
ACRIDIDAE (Grasshopper Family)			
Schistocercis nitens Thunberg	gray bird grasshopper	non-native	uncommon



Figure 1. **Kehalani - 15 Acre Ag Parcel**
TMK: (2) 3-5-01:064 Wailuku, Maui



Figure 2. Kehalani 201-H Affordable Housing Project



Figure 3. View west across project area toward Honoapiilani Highway and the West Maui Mountains.



Figure 4. View north across the project area toward Wailuku.

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APPENDIX D

ARCHAEOLOGICAL ASSESSMENT REPORT

FINAL ARCHAEOLOGICAL ASSESSMENT REPORT FOR A 15.0 ACRE PARCEL LOCATED ALONG WAIALE ROAD IN WAILUKU *AHUPUA'A* AND DISTRICT PŪ`ALI KOMOHANA *MOKU* ISLAND OF MAUI TMK: (2) 3-5-001:064

FOR: Pier Management-Hawaii, LLC

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BY: Jenny O`Claray-Nu (B.A.), Lisa J. Rotunno-Hazuka (B.A.)

and Jeffrey Pantaleo (M.A.)

REVISED FEBRUARY 2018

MAY 2017

ARCHAEOLOGICAL SERVICES HAWAII, LLC.

POB 1015; PU`UNĒNĒ, HI 96784

"Protecting, Preserving, Interpreting the Past, While Planning the Future"

EXECUTIVE SUMMARY

Under contract to Pier Management-Hawaii, LLC of 3401 E. Kentucky Avenue, Denver CO, 80209 and pursuant to recommendations by the State Historic Preservation Division (SHPD); Archaeological Services Hawaii, LLC (ASH) performed an archaeological assessment (archaeological inventory survey with negative findings) for a 15.0 acre parcel located along Waiale Road within Wailuku *ahupua'a* and District, Pū`ali Komohana *Moku*, Island of Maui at TMK: (2) 3-5-001:064.

The current investigation was conducted to determine the presence absence, extent and significance of surface historic properties (if present) and the potential for buried cultural remains. The subject parcel is located along the culturally sensitive Waiale Road/Lower Main Corridor which is known to contain numerous traditional burials and extensive habitation sites.

The proposed development plans comprise an affordable residential housing project and will be processed according to the 201H permit process. It will include residential structures, access roads and associated infrastructural improvements. The subject area has been previously disturbed by prior grubbing, grading and stockpiling of material from sugar cane cultivation and the construction of a retention ditch in the western half of the parcel which continues south outside the project area.

The archaeological assessment was comprised of a 100% pedestrian survey with mechanical test excavations and these procedures were performed from 17-22 March 2018 by archaeological supervisor, Ms. Jenny O'Claray-Nu (B.A.) and archaeologist, Mr. Cody Sheets (B.A.). A total of 40 field hours were expended during the course of this project. Overall coordination and supervision was undertaken by Ms. Lisa Rotunno-Hazuka (B.A.) and Mr. Jeffrey Pantaleo (M.A.) was the Principal Investigator.

A review of the USDA web soil survey indicated that the project area was comprised of the `Īao soil series. `Īao silty clay soil was noted on the east and `Īao clay to the west, although remnant sand dune deposits from the Pu`uone series (PZUE) were known to exist to the east along Waiale Road. A total of 11 mechanical test trenches were conducted at the project area, where the majority were placed in the eastern portion to ascertain the presence/absence of subsurface historic properties and remnant sand dune deposits. The trenches were negative for buried cultural remains, intact sand dune matrices and exemplified disturbances from 0.60 m below surface (bs) to 1.85 mbs, with bedrock encountered from 1.6 mbs (TR8) to 2.30 mbs (TR3).

No historic properties were identified during the subsurface investigations, and these negative results may be due to the compounded disturbances across the parcel. Pursuant to HAR §13-284-7, the overall development plan for the parcel will have no effect on significant historic properties. However, given that

the subject parcel is in close proximity to known, unmarked traditional sand burials (east of the project area), the proposed mitigation pursuant to HAR §13-284-8 (1) (A) will comprise data recovery in the form of archaeological monitoring. Prior to the commencement of construction activities, an archaeological monitoring plan (AMP) will be prepared and submitted to SHPD for review and approval.

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INTRODUCTION

Under contract to Pier Management-Hawaii, LLC of 3401 E. Kentucky Avenue, Denver CO, 80209 and pursuant to recommendations by the State Historic Preservation Division (SHPD); Archaeological Services Hawaii (ASH) has prepared this Archaeological Assessment (AA) report according to the standards set forth in the Hawaii Administrative Rules (HAR) §13-284-5 (5) (A) and 276-5 (a) and (c) for a parcel located along Waiale Road within Wailuku *ahupua'a* and District, Island of Maui, TMK: (2) 3-5-001:064 (Figures 1-3).

The current investigation was conducted to determine the presence absence, extent and significance of surface historic properties (if present) and the potential for buried cultural remains. The subject parcel is located along the culturally sensitive Waiale Road/Lower Main Corridor which is known to contain numerous traditional burials and extensive habitation sites.

The proposed development plans comprise an affordable residential housing project and will be processed under a 201H permit application. The planned improvements will include residential structures, access roads and associated infrastructural improvements. The subject area has been previously disturbed by prior grubbing, grading and stockpiling of material from sugar cane cultivation and the construction of a retention ditch within the western half of the parcel which extends further south outside the project area. The retention ditch extends along the *mauka* and *makai* (west and east) sides of Waiale Road to a retention basin to the south near Waiko Road. These drainage improvements underwent prior archaeological studies comprised of archaeological assessment and monitoring program (Sinoto and Titchenal 2005 and Morawski, Shefcheck, and Dega 2006).

PROJECT AREA

The project area, comprised of 15.0 acres is located along the base of the West Maui Mountains within the northwestern portion of the isthmus (see Figures 1 and 2). It situated adjacent and on the west side of Waiale Road, centrally located between Waikapu and Wailuku Towns. Specifically, it is bounded to the north by Kuikahi Drive, to the south by an un-named gulch and partially developed lands of Emanuel Lutheran Church, to the east by Waiale Road and to the west by Honoa`pi`ilani Highway (Figures 1-3).

ENVIRONMENT

The parcel has undergone extensive compounded disturbances comprised of grubbing and grading for prior sugar cane cultivation, sand mining and recent construction activities for the drainage ditch, parking lot, access roads and existing drainage ditch. Due to these prior activities, the parcel is open (few trees), with stockpiles and densely covered of low grasses and weeds. Vegetation in the project area is dominated by fallow sugar cane (*saccharum officinarum)* with various *koa haole* (*Leucaena glauca*), cane

grass (*Setaria sp.)*, *`ilima* (*Sida fallax*), *`uhaloa* (*Waltheria americana*), *Ki* or *ti* (*Cordyline fruticosa*) and various grasses and weeds.

Rainfall for the area averages between 20-30 inches a year, predominantly occurring during the winter months between November and February (Giambelluca et. al. 2013) (Armstrong 1973). The subject parcel slopes west to east from 310 ft. to 360 ft. AMSL and according to the web soil survey, contains two soils from the `Īao soil series; however past experience in the area has shown that the Pu`uone Sand (PZUE) is extent within the eastern portion of the parcel. The `Īao silty clay (IaA) comprises 30% of the parcel along the eastern third and occurs on 0-3% slopes, is well-drained and good farmland when irrigated. The remaining portion of the parcel contains `Īao clay 3 to 7% slopes and is also well drained, prime farmland if irrigated. As previously discussed, the eastern section is known to contain Pu`uone Sand, which likely overlies the `Īao silty clay.

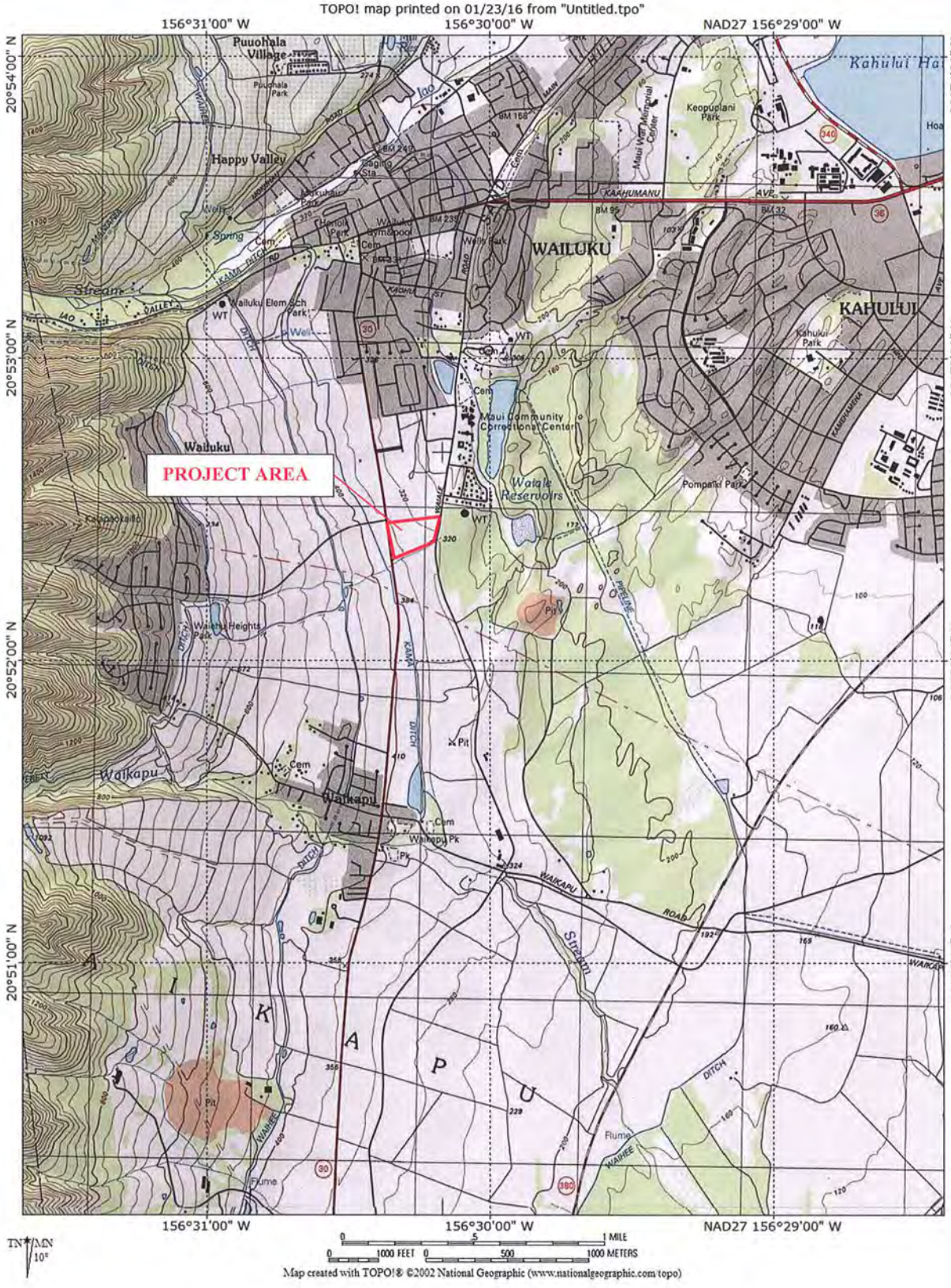


Figure 1. Map Showing Location of Project Area on USGS Quadrangle

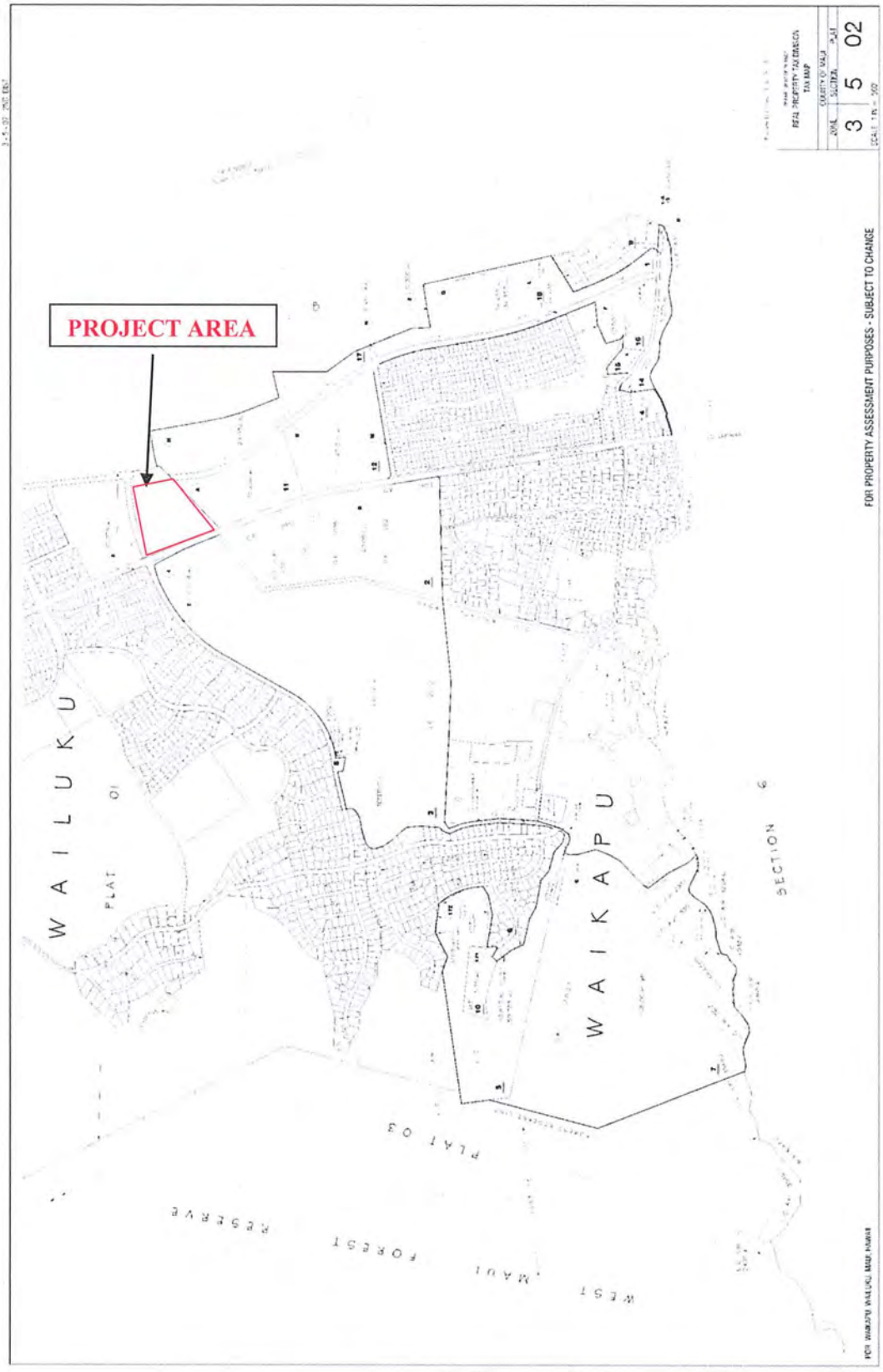


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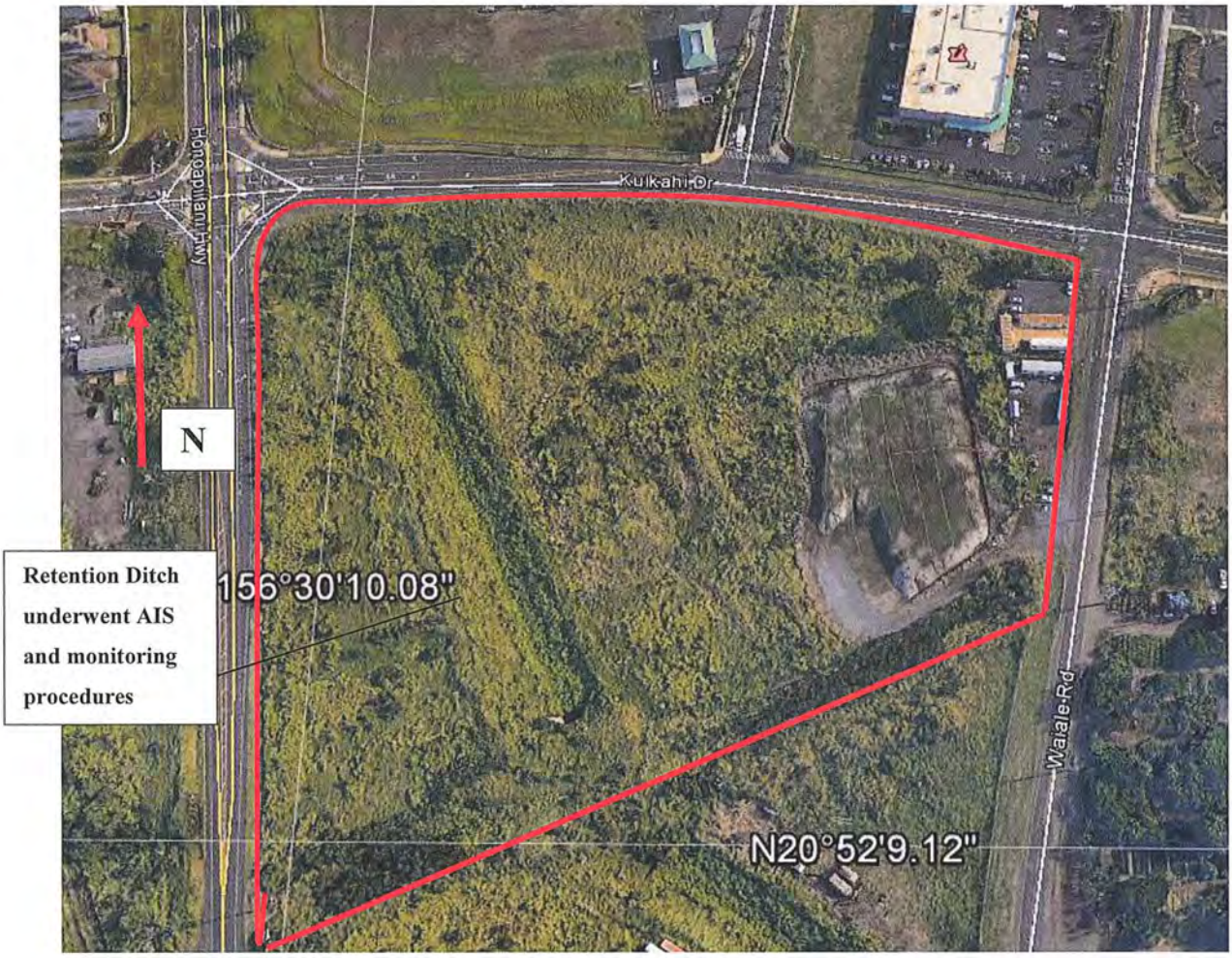


Figure 3. Aerial Photograph of Project Area Showing Existing Conditions

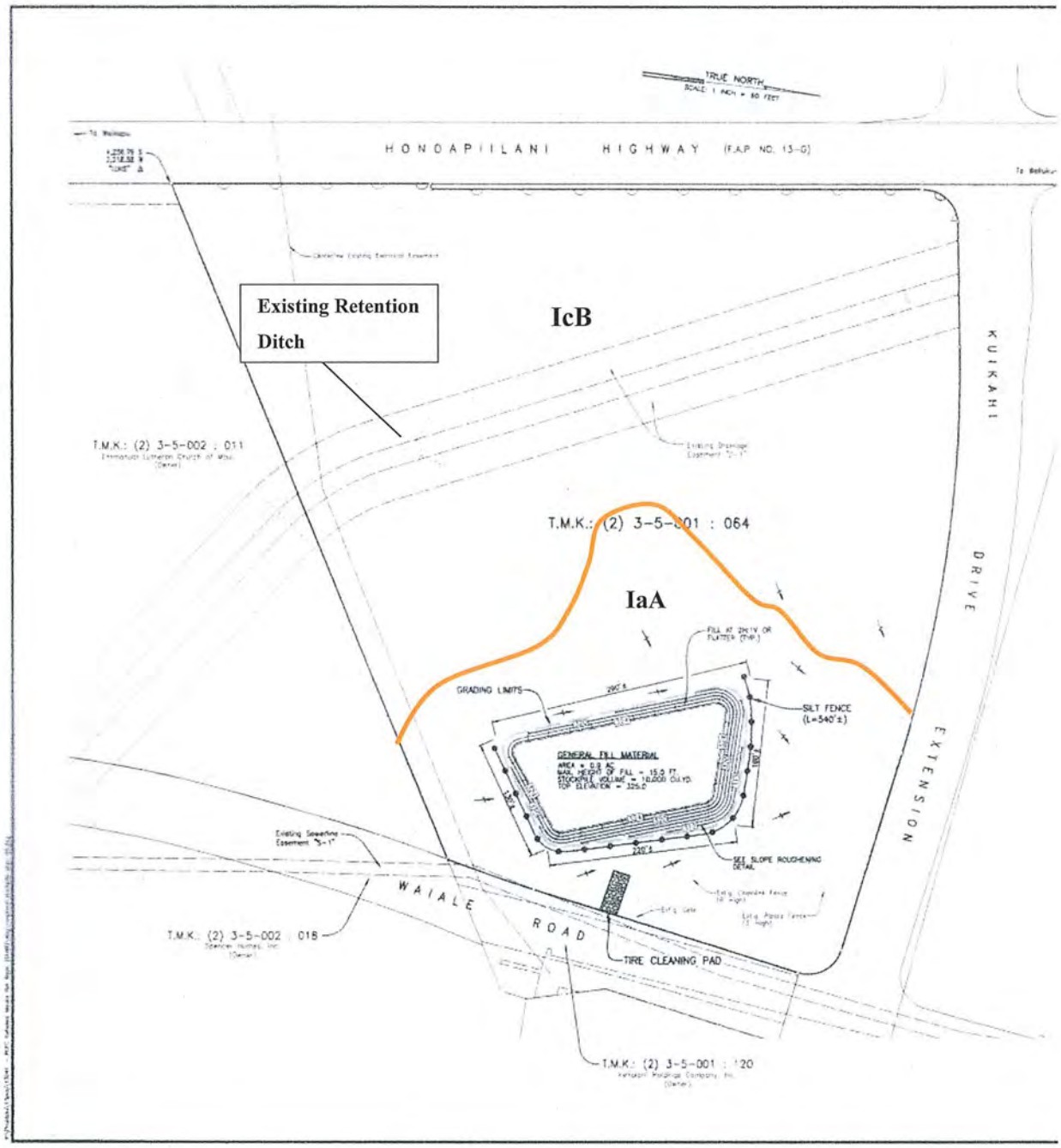


Figure 4. BMP Map of Project Area

HISTORIC BACKGROUND

Since this is an Archaeological Assessment report, only pertinent information regarding traditional and historic events, land use, previous archaeology and site expectations will be provided below as stated in Chapter §13-284-5(5)(A).

> *Chapter §13-284-5 (5) (A) an archaeological assessment shall include information on the property and the survey methods set forth in §13-276-5 (a) and (c). Chapter §13-276-5 (a) (1)-(3) includes the information on the property, and (c) (1)-(8) is the methodology section.*
>
> *Chapter §13-276-5(b)* ***is not*** *required for the Archaeological Assessment Report. This subsection provides detailed background research (archival research, previous archaeological studies, LCA and Grant research) to predict the kinds and distributions of historic properties that may be extant and to provide a context for evaluating significance of these historic properties.*

Legendary and Traditional History

The project area is located within the traditional *Moku* (district) of Pū`ali Komohana, the modern District of Wailuku and Wailuku *ahupua`a* (Figure 5). Wailuku District is comprised of the following *ahupua`a*: Waihe`e, Waiehu, Waikapū, Wailuku and Pūlehu Nui, and has been referred to as Nā Wai`ehā (the four waters) due to the four inland associated streams and valleys inland; Waihe`e, Waiehu, Wailuku (Wailuku River and `Īaō Valley), and Waikapu (Pukui and Elbert 1986: 377) (Figure 5). Due to this geologic landscape, Wailuku District was extremely fertile with an abundance of water; thus, enabling large scale cultivation of *kalo* (taro). Agricultural terraces spilled over onto the slopes at the entrances of valleys…and taro was fed by mountain rains (Handy and Handy 1940:108). Other accounts note that the coastal regions of Wailuku *ahupua`a* contained lesser areas of cultivated sweet potato and an abundance of marine resources.

As exemplified on Figure 6, Wailuku *ahupua`a* occupies almost half of Wailuku District comprising the northern portion of the isthmus closest to the coast. It extends from Paukūkalo to the west, Kahului Bay and Kapukaulua, which is where Kailua Gulch empties into the ocean and is the eastern boundary for both Wailuku District and Wailuku *ahupua`a*. Ethno-historic accounts indicate that a battle occurred in 1738 at Pu`unene between Ka`uhi and Peleio`holani (Oahu) chief against Kamehameha-nui and Alapa`i warriors. The battle at Pu`unene was considered one of the fiercest, hardest fighting wars where "Pele`io`holani was surrounded on all sides, *mauka* and *makai*, by the forces of Alapa`i led by Kalaniopu`u and Keoua. The two ruling Chiefs met there again, face to face to end the war and became friends again, so great had the slaughter been on both sides…" (Kamakau 1961:74).

A number of battles took place in the neighboring Waikapū region, including Fornander's (1969:153) account of the battle of the Waikapū Commons or the Battle of Kakanilua. The following account describes the battle on the sand hills southeast of Wailuku:

> ...The detachment or regiment known as the Alapa, mustering 800 men, was selected for this hazardous expedition, and with high courage they started across the isthmus of Kamaomao, now known as the Waikapū common, as the legend says, "to drink the waters of Wailuku that day. "...Little did this gallant troop apprehend the terrible fate that awaited them...Kahekili distributed his forces in various directions on the Wailuku side of the common, and fell upon the Hawaii corps d'armee as it was entering among the sandhills southeast of Kalua, near Wailuku. After one of the most sanguinary battles recorded in Hawaiian legends,...the gallant and devoted alapa was literally annihilated; only two out of the 800 escaped alive to tell Kalaniopuu of this Hawaiian Balaclava (Fornander 1969:153).

Historic Period

In 1778, with the appearance of Captain James Cook in Kahului Bay on Maui, the post-contact documentation of the indigenous populace on Maui began. A comprehensive account of history of the Hawaiian Kingdom commencing from contact (1778) is provided in Kuykendall (1938). There were additional voyagers to Hawai`i subsequent to the arrival of Cook - including La Perouse and Vancouver. By the early 1800s, whaling ships, merchants, and missionaries had arrived. The arrival of foreigners severely impacted the life style and demographics of the Hawaiian people and caused a significant depopulation of the native people due to the introduction of Western diseases, in combination with the populace beginning to cluster around growing port towns. According to Kuykendall (1938:336), an early estimate of the population (made by missionaries) in 1823 was 142,050 and decreased to 86,593 by 1850.

In 1845, land reform legislation, which developed into 'The Great *Māhele* in 1848 was established. During the *Māhele*, crown lands were divided between the Government, Royalty, and commoners. It was during this time that the *maka`ainana* and foreigners could apply for land ownership by stating their *kuleana* claim to the Board of Commissioners to Quiet Land Titles. As part of claim process, the *maka`ainana* described the land and its contents, ownership on adjoining parcels, and discussed how the land was being utilized (i.e. house lot, taro, *lo`i*, fishpond and etc.). Once the claim was validated, a Land Claim Award (LCA) was awarded and following payment, a Royal Patent (R.P.) was issued.

Unfortunately, the *Māhele* movement and or private land ownership, like several other historic events (missionaries, whaling ships and etc.) drastically altered the Native Hawaiian way of life with deleterious effects to socio-political relationships. The concept of the traditional *ahupua'a,* a communal piece of land containing various ecosystems to be utilized, nurtured and cultivated by its inhabitants began to shift towards private ownership. The sharing of land was so interconnected with everyday life that again, it severely affected the Native Hawaiian populace.

> In 1848, there were approximately 88,000 Hawaiians, but only 14,195 applications were made...of the 14,195 *kuleana* claims, only 8,421 were actually awarded. The

> *Maka`ainana* received less than 1% of the land. Countless Native Hawaiians lost their land use rights as a result of the Great Māhele of 1848, with the establishment of a system of private land ownership. Many landless Native Hawaiians signed on as laborers in the emerging sugar industry, which began on Maui in the 1820s. Within a short time, large tracts of land were turned over to commercial agriculture, primarily sugarcane cultivation (Kame`eleihiwa 1992:295). In many cases, the purchases or leases to non-Hawaiians included entire *`ili* or *ahupua`a*.

Thus, by the end of the Māhele, naturalized foreign citizens were given the right to purchase land in Hawai`i. The ultimate result of this decision placed more land in the hands of non-Hawaiians than native Hawaiians between the years of 1850 and 1865 (Moffatt and Fitzpatrick 1995:51).

LAND USE

The project area is positioned within Grant 3343 to Claus Spreckels, which historically has been utilized for sugarcane cultivation and further discussed below (Figure 5 and Table I). In 1848, the entire Wailuku *Ahupua`a* (L. C. A. 7713:23) was designated as Government Lands and or Crown Lands. The Native Register (1846-1848) documents King Kamehameha I's great granddaughter, Ruth Ke`elikolani, and the sister of Kamehameha IV and V, Victoria Kamamalu, as the only persons of royal heritage that are designated as land owners. On September 30th, 1882, King Kalakaua signed over 24,000 acres in the Wailuku *Ahupua`a* (eastern portion) to Claus Spreckels in a fee-simple title "Grant 3343".

The earliest commercial sugar production on Maui Island began in Wailuku in 1823 when Hungtai Sugar Works was founded by Chinese merchants (Morrow n.d.:51-51). Wailuku Sugar Company was started in November of 1862 by James Robinson and company, Thomas Cumming, J. Fuller, and C. Brewer and Company. In 1865, C. Brewer and company acquired controlling interest, with Robinson and Company and Cumming as the minority stockholders.

In 1876, when the Reciprocal Trade Treaty was signed in Washington D.C., this caused an increase in the price and demand for sugar, creating a boom in the sugar cane industry. In 1878, Alexander and Baldwin purchased land east of Kahului for sugar cane production and founded the Pā`ia Plantation and incorporated the Haiku Plantation the following year (Best 1978:13). In 1882, Princess Ruth sold one-half of the Crown Lands of Hawai`i to Claus Spreckels in order to settle her debts with him. Spreckels already held a lease (purchased from Henry Cornwell) for 16,000 acres of Wailuku *ahupua`a* (Waikapū Commons), dating from 1878 (R.P. 3152) and as stated above King Kalakaua gave him (Grant 3343) in 1882, a 24,000 acre portion of the southeastern section of Wailuku *ahupua`a*, in return for the surrender of his claim to Crown Lands and established Hawaiian Commercial & Sugar (HC&S). In 1898, control of HC&S passed from Claus Spreckels to that of S.T. Alexander and H.P. Baldwin (Figure 7). In 1926,

Alexander and Baldwin bought Spreckel's Hawaiian Commercial and Sugar Company, which resulted in the intensification of the sugar industry in Wailuku.

The escalation of the sugar industry on Maui brought with it the need for water (irrigation ditches) and imported labor. Immigrants from around the world (Scandanavian, Scottish, Italian, German, Russian, Spanish, Hawaiian, Chinese, Portuguese, and Japanese) arrived on Maui to work on the sugar plantations; and hence the establishment of several plantation camps and railroad spur lines in the Wailuku and Waikapu areas. As shown on Figure 8, no plantation camps were in the vicinity of the subject parcel (Figure 8).

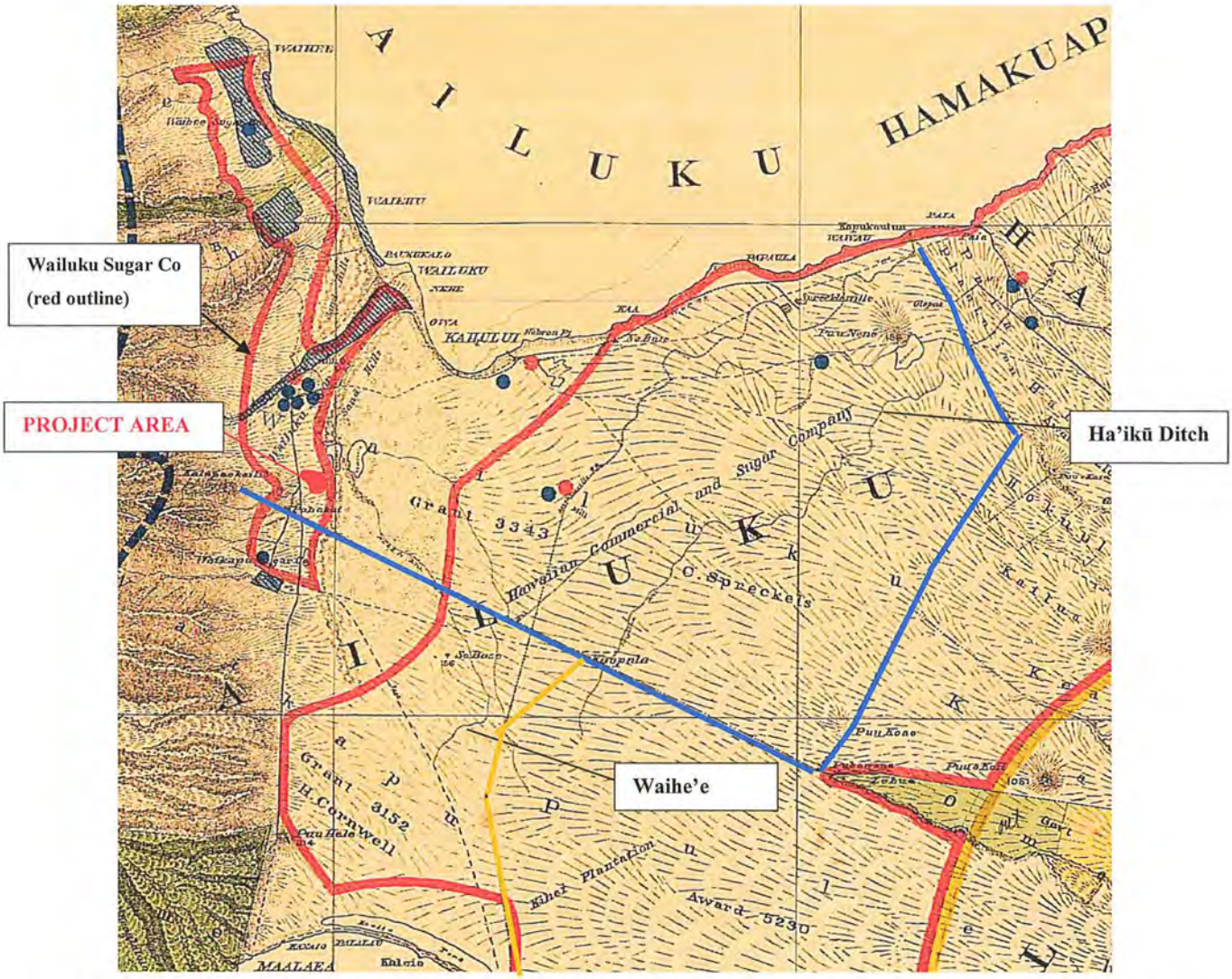


Figure 5. Portion of Hawaiian Government Survey Registered Map (1268) Showing Portions of Wailuku *Ahupua`a* (blue line), Waikapu and Pūlehu Nui *ahupua`a* (either side of gold line) Project Area within HC&S Landholdings and Grant 3343 to C. Spreckels (Dodge 1885 updated by Donn 1903)

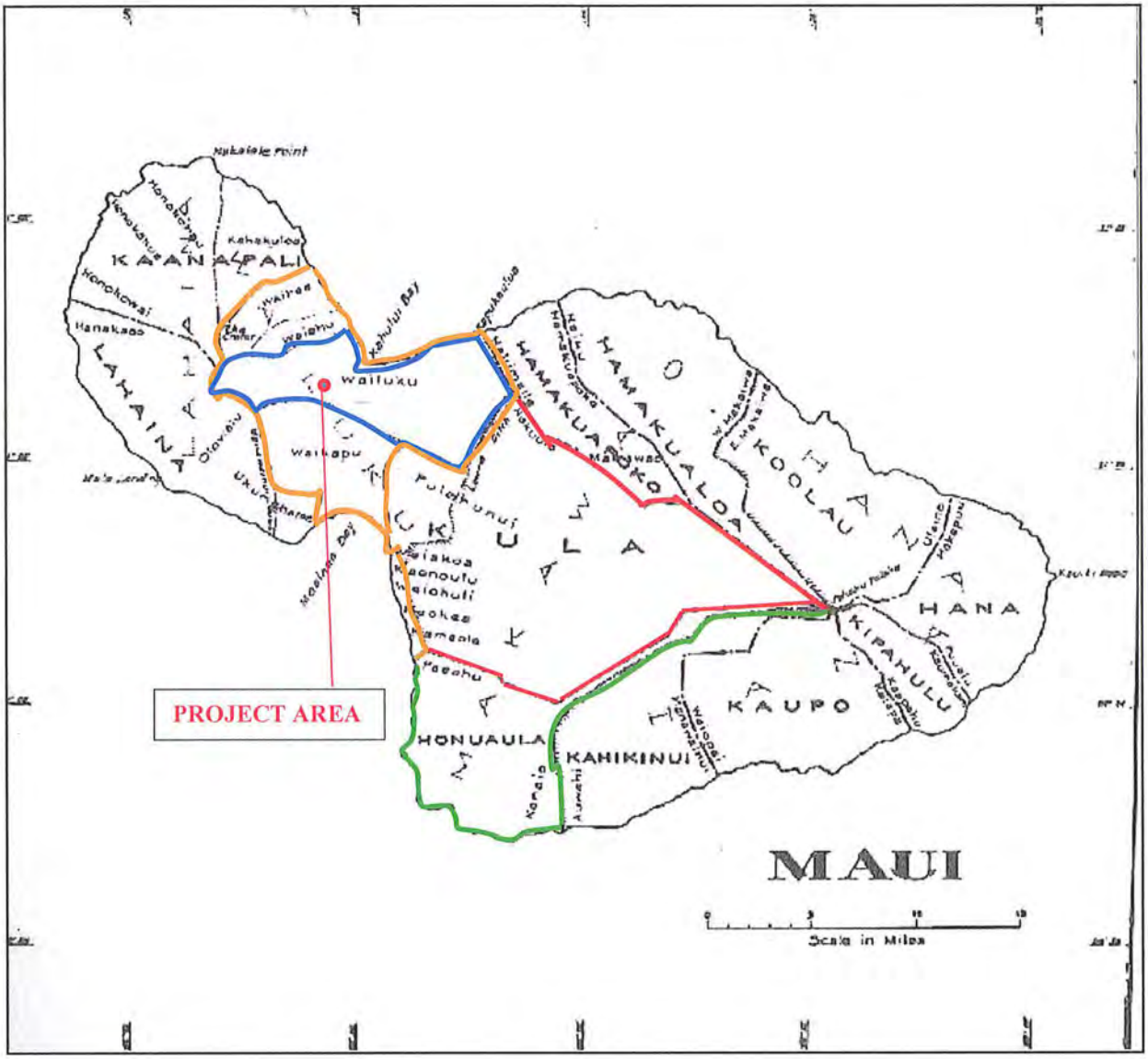


Figure 6. Island of Maui Map Showing Districts and Ahupua`a Boundaries (from a Gazetteer of Territory of Hawai`i, John Wesley Coulter-1935)



Figure 7. Approximate Location of Project Area (red) on Monserrat Map of 1882 (note name above project area exemplifies name of Alexander)

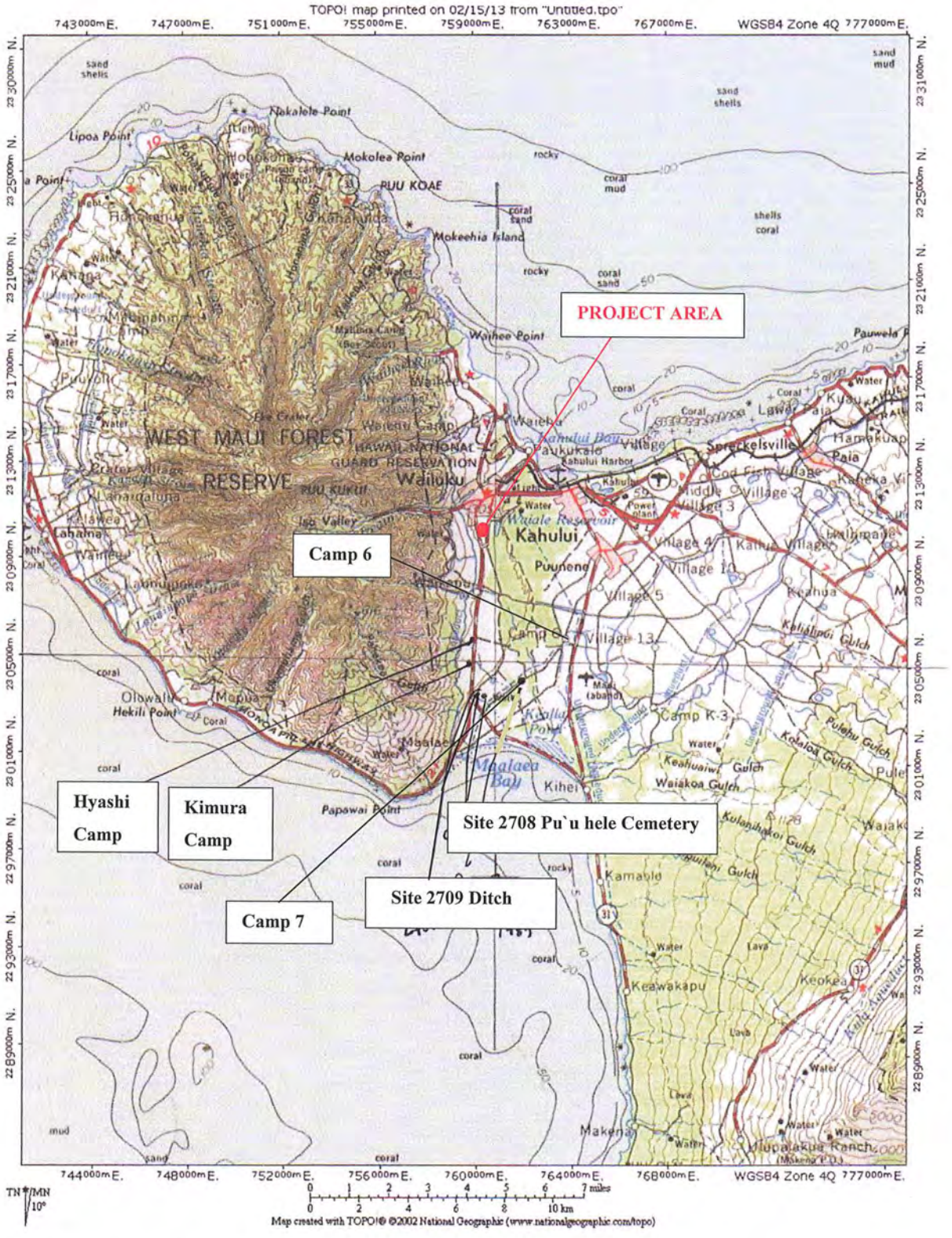


Figure 8. USGS Map Showing the Location of Closest Plantation Camps to the Subject Project Area (red)

Table I. Summary of LCA's and Grants Adjacent to Project Area (Source: Waihona `Aina Corp. 2004)

NAME	L.C.A.	R.P.	*GRANT*	*COMMENTS*	*ACREAGE*
H. Cornwell			3152	Present project area within awarded land	256.113
Wm. McLane	3201			Land given in 1822 by Puupahoehoe	3.85
Keliolelo	3525			Taro land and houselot	1.77
Wm. Crowningburg	433			Houselot; 14 patches (son-in-law of *konohiki* Puupahoehoe	5.93
C. Louzada / H. Cornwell			2951	No land use indicated	17
Spreckles		3343		Waikapū Commons	
				PROJECT AREA	16,000

PREVIOUS ARCHAEOLOGY

As discussed in the aforementioned Historic Background section, since this is an archaeological assessment, only those studies performed in close proximity to the subject parcel will be discussed below. The early archaeological studies conducted on Maui consisted of recording *heiau* (religious structures) sites along the coastline. These studies were carried out by Thrum (1909) and Stokes (1916). An island-wide survey was executed in 1928 by Winslow Walker (1931) though the Bishop Museum, where numerous *heiau* sites were recorded primarily in the west, central portion of Wailuku District and many of these have been damaged and or destroyed. As exhibited on Figure 10, no sites were recorded in the vicinity of the subject parcel (Figure 10).

Within the project area, the western portion underwent an archaeological survey (Titchenal 1996) and monitoring procedures (Morawski et. al. 2006) for the existing retention ditch in the west, central portion (see Figures 3 and 10). Aki Sinoto Consulting conducted an archaeological inventory survey of the proposed retention basin and adjoining lands in Waikapū and Wailuku *ahupua`a*, Wailuku District, Maui Island (TMK 3-5-01:17 por: 3-5-02:1, por.), located within and south of the current project area. No surface cultural remains were located during the surface survey, and no subsurface cultural remains or deposits were identified in the thirteen backhoe trenches excavated in selected localities throughout the project area.

Site 50-50-04-2916 comprised of human skeletal remains were identified at the Maui Home Affordable Living Shelter by Donham in 1992.

Xamanek Researches (Fredericksen 2004) recently conducted an archaeological inventory survey for the Waikapū affordable housing subdivision (TMK 3-5-02:001 por and 3-8-07:101), located adjacent to; south of the present project area (see Figure 10). One previously identified historic property was noted during the inventory survey. State Site 50-50-04-5474 consists of an approximate 2000- foot portion of the Kama Ditch and a substantial reservoir (Reservoir No. 6). No other cultural remains were identified during the survey, it was estimated that approximately 40% of the project area was previously impacted by sand mining activities in the last 20 or so years and that much of the remainder of the 100-acre study area was most recently planted in pineapple. Determination by the SHPD architecture branch that sufficient information was collected at Site 5474 Kama Ditch to document the site and that the proposed demolition of the bulk of Site 5474 for proposed development was approved.

Scientific Consultants (Dega 2004) conducted an archaeological inventory survey of approximately 348 acres in Wailuku for the Kehalani Mauka Subdivision, Wailuku *ahupua`a* and District just northwest of the project area (TMK 3-5-001:001 por) (see Figure 10). Eight historic sites were documented during the

survey, two of which were recorded during a previous project. State Site 50-50-04-5473 represents Hopoi Reservoir, this reservoir predates Hopoi Camp and was present at least by 1922. Hopoi camp was not identified during the survey. State Site 50-50-04-5474, the Kama Ditch, was identified east of the Hopoi reservoir running in a north-south direction to Waikapū. State Site 50-50-04-5493 was designated for another unnamed ditch running in a north-south direction occurring along the western flank of the parcel. State Site 50-50-04-5197 represents the Waihe`e Ditch, constructed between 1905 and 1907. The four other sites consist of a combination of historic-modern roadways (Site 5489), a system of smaller historic ditches (Site 5490), a historic artifact scatter on the surface (Site 5491), and several clearing mounds likely created during the plantation era (Site 5492). Twenty-seven subsurface testing trenches revealed homogenous soil matrices across the project area.

Archaeological monitoring was implemented for the Kehalani Subdivision and off-site improvements along the Waiale Road by Scientific Consultant Services (Morawski, Shefcheck, and Dega 2006) (see Figure 10) and Archaeological Services Hawaii (ASH). Five sites were recorded and consisted of a historic road bed (50-50-04-5963), a sugarcane flume (50-50-04-5964), an *in situ* burial (50-50-04-5680), and two areas of isolated human remains (50-50-04-5965 and -5966). Remains associated with the isolated finds were encountered in a previously disturbed soil matrix that was most likely associated with the initial construction of the Waiale Road.

Archaeological Services Hawaii, LLC performed an archaeological inventory survey (AIS) within a 50-acre parcel of land in Wailuku and Waikapū *ahupua'a*, Wailuku District, Maui Island, TMK: (2) 3-5-002:001 portion, for the proposed development of the Emmanuel Lutheran Church (ELC) adjacent and south of the subject parcel, and the Valley Isle Fellowship (VIF) (see Figure 10). The parcels were subsequently subdivided into two approximate 25.0 acre parcels and assigned TMK's [2] 3-5-002:011 for the north and [2] 3-5-002:012 for the south. The AIS included a pedestrian survey with subsurface backhoe testing of a total of 25 backhoe trenches (TR1-25). Results of the pedestrian survey identified one historic property, a disturbed segment of State Site 50-50-04-5474, the Kama Ditch, situated within the southwestern portion of the project area. Also noted was a metal sluice gate, designated Feature 1 of Site 5474. The ditch, also known as *kamaauwai* was constructed around 1905 to 1907 and provided water to irrigate the sugar cane fields surrounding the project area. Site 5474 was assessed as significant under Criterion "a" because of its association with the plantation era and Criterion "d" for its information content under the Federal and State historic preservation guidelines (Guerriero et. al. 2004 revised 2016).

The closest known burial sites to the project area are Site 50-50-04-5965 (secondarily deposited human remains in disturbed soils) identified during the monitoring procedures for the retention basin and trench, as well as Sites Site 50-50-04-6573 and 6261 situated along Kuikahi Drive at the current Walgreens Pharmacy (Site 50-50-04-6573), and along the north and south sides of Kuikahi Drive just near the entrance to Maui Lani (see Figure 10). An AIS (2005) and AMP (2007) were conducted of the Kuikahi Drive Extension and a portion of Maui Lani Parkway corridor which intersects with Kuikahi Drive (Rotunno-Hazuka et. al. 2007). Site 6573 is comprised of a primary traditional burial designated Feature 1 which was preserved in place, and disturbed human skeletal remains (Feature 2), which were reinterred adjacent to the preservation area established around Feature 1. The second Native Hawaiian burial area is Site 50-50-04-6261 comprised of primary burials and secondary deposits of human remains designated Features 1a-1c and 2-12. Site 6261 was identified during monitoring and data recovery procedures and was subsequently preserved along the north and south sides of Kuikahi Drive (ibid).

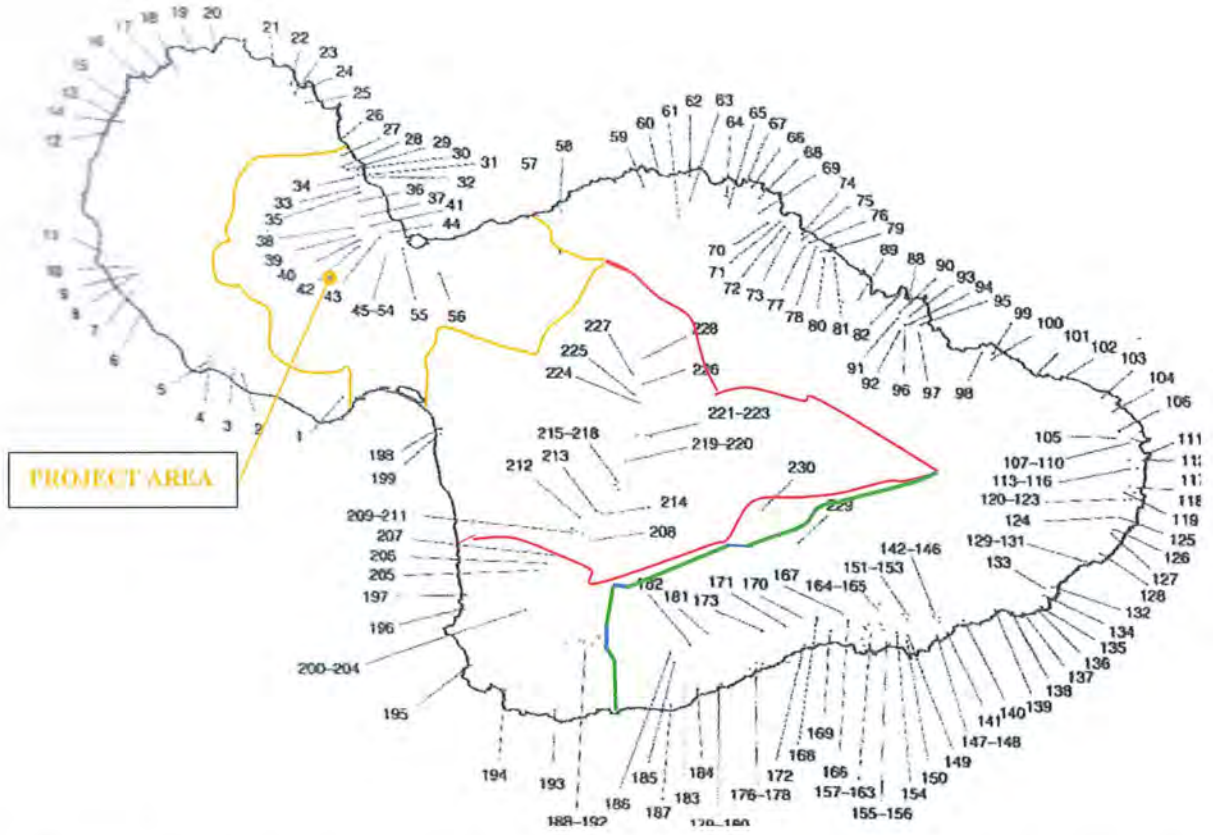


Figure 9. Walker's Site Map Showing Recorded *Heiau*, Project Area and approximate Wailuku (blue), Kula (red) and Honua`ula *Moku* (Traditional) Boundaries (green) (map adapted from Sterling 1998)

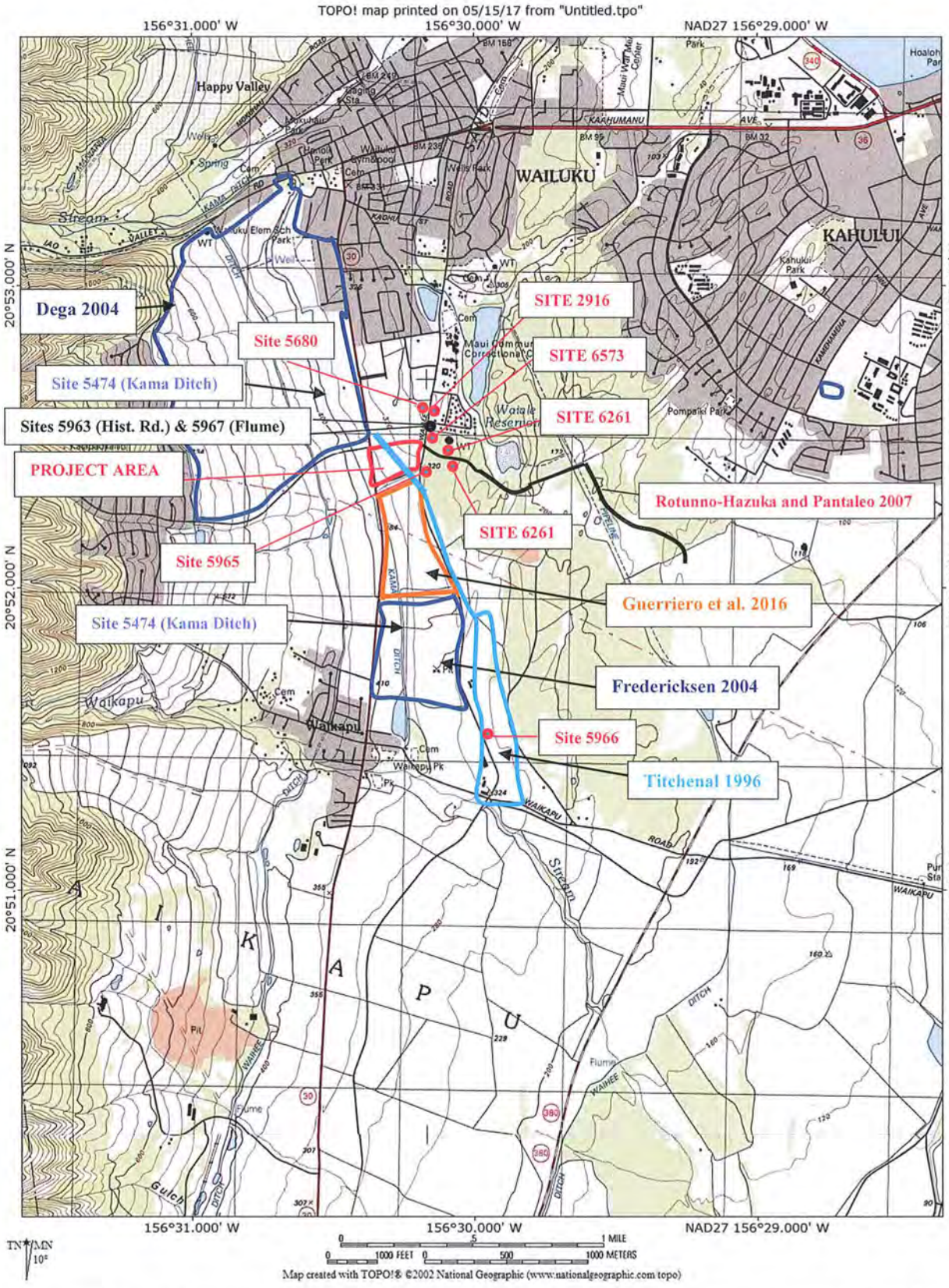


Figure 10. USGS Wailuku Quad (2002) Map Showing Previous Archaeology and Sites near Project Area

SETTLEMENT PATTERNS

The settlement patterns of an indigenous population are surmised from a variety of information and research. Previous archaeological findings and archival research (such as information retrieved during the Great Māhele and etc.) are two of the main determining factors. Another important factor is the existing geology or landforms in the area, be it a harsh or hospitable environment. The proximity to fresh water or marine resources, rain fall, the presence of basaltic ridges and or *a`a* lava flows and etc. As previously discussed, the project area is between Wailuku and Waikapū Towns along Waiale Road which was actively settled during the pre-historic and historic periods. During the pre-Contact era, permanent habitation sites with extensive agricultural complexes would be located in the lower and upper valleys due to the numerous streams and valleys of Nā Wai `Eha; however based on the close proximity of the coast and results of studies in these shoreline areas, dual permanent settlement of the uplands with a focus on agriculture and the coastline with an emphasis on marine exploitation. The Wailuku Sand Hills appear to be more intensively occupied closer to the shore, and less settled more inland but extensively utilized for the interment of Native Hawaiian burials.

SITE EXPECTABILITY

The presumed settlement patterns, coupled with the prior investigations assist in determining the types of historic properties to be expected. However due to the compounded disturbances across the project area from sugar cane cultivation, sand mining and the construction of the retention ditch, the likelihood that historic properties have survived is low but would comprise Native Hawaiian burial features with remnant agricultural (terraces) and or habitation (cultural layers) sites. Since no LCA were present within the subject parcel, historic period sites may comprise agricultural features and refuse sites and or remnant features from WWII.

METHODS AND PROCEDURES

A review of previous archaeological investigations was conducted at the ASH and SHPD libraries in Ma'alaea and Pu`unēnē prior to and during the initiation of the testing strategy. Archaeological investigations included a pedestrian survey and backhoe test trenching which were performed from 17-22 March 2017 under the supervision of Ms. Jenny O'Claray-Nu (B.A.) and archaeologist, Mr. Cody Sheets (B.A.). A total of 40 field hours were expended during the course of this project. Mechanical excavations were undertaken with an excavator provided by T.J. Gomes. Overall coordination and supervision was performed by Ms. Lisa Rotunno-Hazuka (B.A.), drafting by Mr. Nico Fuentes (M.A.) and Mr. Jeffrey Pantaleo (M.A.) was the Principal Investigator.

FIELD METHODS

Initial investigations consisted of a pedestrian survey to determine the presence of surface historic properties, disturbances and or basalt outcrop which would aide in establishing the location of test excavations. No surface sites were noted during the survey; thus subsurface explorations were undertaken in the form of mechanical test trenches. All excavations were undertaken with the supervision of the archaeologist and terminated when sterile subsoil was reached. The testing method employed was systematic random sampling where the areas to be analyzed are chosen at random with a subsequent pre-determined strategy (Hester et. al. 2009). "Use of this sample technique guarantees more uniform coverage of an area than would likely occur with simple random sampling" (Hester et. al. 2009:29) and therefore allows the investigator to obtain information about the subsurface conditions across the project area. The backhoe trenches ranged from 4.0 m to 6.0 m long by 1.2 m wide by 1.4 to 2.3 m deep.

Each trench was recorded using scaled stratigraphic profiles, photographs, dimensions and soil descriptions. The location of the trenches was plotted utilizing known points from the aerial photographs and tape and compass from boundary corners. During the course of this project, all accepted standard archaeological procedures and practices were followed.

LABORATORY PROCEDURES

Soil samples collected during the excavations were stored in bags and labeled with provenience data and date collected. The dry soil color was recorded utilizing the Munsell color system, and soil texture using USDA soil terminology.

RESULTS OF SURVEY

A total of 11 backhoe test trenches were executed across the parcel and were negative for buried cultural remains (Figure 11 and Table II). The trenches exhibited extensive disturbances from 0.65 m (TR5) to 1.85 (TR5), where bedrock was recorded from 1.6 m (TR8) to 2.30 mbs (TR3), imported sand was noted in Layer I (TR2) and within Layer III (0.70 mbs) in TR9 and a rocky lens, possible alluvial deposition was recorded in TR6 at 1.85 mbs. Trenches 1-3 were positioned in the central portion, TR4 along the northern perimeter in the eastern half, TR's 5-9 were placed in the eastern section around the proposed detention basin for future construction activities and to ascertain if remnant sand dune deposits were extant closer to Waiale Road, and TR's 10-11 were situated in the western portion. The test trenches are described and presented below.

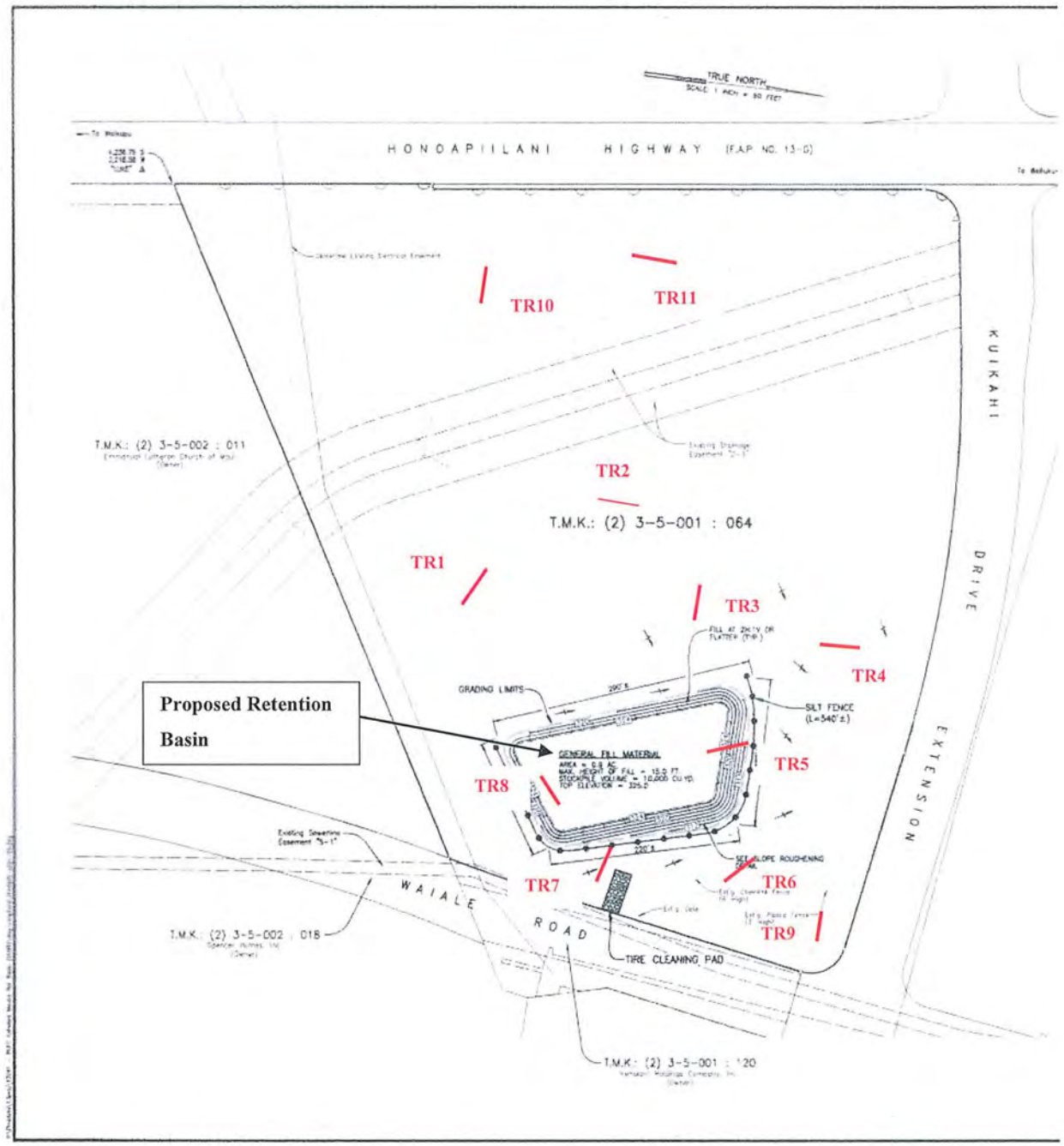


Figure 11. BMP Map Showing Location of Trenches 1-11

Table II. Summary of Trench Testing at Project area

TR	Length (m)	Width (m)	Depth (m)	Orient TN°	Disturbed	Cultural	Assessment
1	6.0	1.2	1.9/2.0	133/313	I/II	none	agricultural
2	7.0	1.2	2.0/2.2	180/360	I/II/III	none	drainage way
3	6.7	1.4	2.6	354/154	I/II	none	agricultural
4	6.5	1.2	2.5	180/360	I/II	none	agricultural
5	5.6	1.1	2.6	359/179	I/II	none	agricultural
6	6.6	1.2	2.4/2.45	349/169	I/II/III	none	ag/alluvial
7	6.2	1.2	2.3	286//106	I	none	construction
8	6.0	1.2	2.0/2.2	251/71	I/II/III	none	agricultural
9	4.3	1.3	1.7/1.8	90/270	I/II/III	none	construction
10	5.5	1.3	1.7/1.8	90/280	I	none	agricultural
11	6.0	1.1	1.7/1.8	360/160	I	none	agricultural

TRENCH 1

Trench 1 was placed in the south central portion of the project area and measured 6.0 m long by 1.2 m wide by 1.9/2.0 m deep and oriented 133/313° (see Figure 11 and Table II). The excavations revealed five stratigraphic layers which were negative for subsurface cultural remains (Figures 12-14). Layers I and II were previously disturbed by agricultural and existing drainage trench development

Layer I 0 –0.15/20 mbs; (7.5YR2.5/2, 2.5/3) agricultural fill zone, dry color very dark brown gravelly very fine silty loam; few sand pockets, common inclusions of rootlets and scattered angular pebbles and cobbles (50%); very abrupt wavy boundary, no cultural remains observed.
Layer II 0.15/0.20-0.80 mbs; (10YR3/2, 3/3) dry color dark grayish brown silt loam; intermix with large and small sub-angular to angular pebble and cobble scatter (30%); abrupt wavy boundary; no cultural remains observed.
Layer III 0.80-1.20/1.30 mbs; (10YR3/3,3/4) dry color very dark brown mottled dark brown stony silt clay; very few rootlet and common layers of sub-angular and angular pebble and cobble inclusions (50%); very abrupt wavy boundary. No cultural remains observed.
Layer IV 1.20/1.30-1.90/2.0 mbs; (7.5YR2.5/3) dry color very dark brown stony silt clay; prismatic of sub-angular and angular blocky inclusions intermix with common layers of sub-angular and angular boulder and cobble inclusions (50%); very abrupt wavy boundary. No cultural remains observed.
Layer V 1.9/2.0mbs; a basal layer; gray mottled grayish brown decomposing to hard bedrock.



Figure 12. Overview Photograph of Proposed TR1 (View to Southwest)



Figure 13. Photograph of Trench 1 (left) (View to South); Photograph of East Wall at TR1

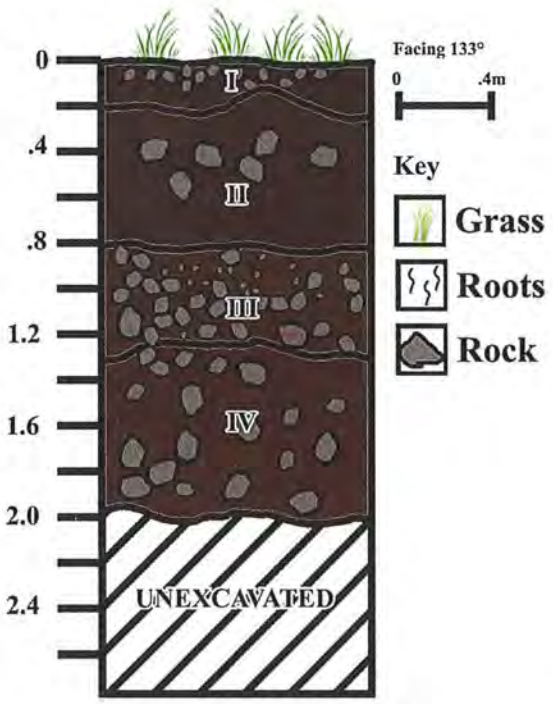


Figure 14. Stratigraphic Profile of East Wall at TR1

TRENCH 2

Trench 2 was located in the central portion of the project area east of the existing retention ditch (see Figure 11 and Table II). It measured 7.0 m long by 1.20 m wide by 2.0/2.2 m deep and oriented 180/360°. The excavations revealed three stratigraphic layers which were negative for subsurface cultural remains (Figures 15 and 16). Layers I and II observed to be previously disturbed by the drainage way development. Layer I appear to be a portion of an access road that comprised of compact gravel and pockets of sand.

> **Layer I** 0–0.22/0.30 mbs; (10YR,3/1, 3/2,5/6) gravel fill with imported sand pockets, dry color dark grayish brown to dark brown very fine silt mottled brown fine sand pockets; intermix with common sub-angular to angular pebble (50%) very abrupt wavy boundary, no cultural remains observed.
> **Layer II** 0.22/0.30-0.60/0.70 mbs; (7.5YR2.5/3, 2.5/2) color very dark brown stony silt; few rootlets intermix with common sub-angular to angular pebble and cobble inclusions (40%); very abrupt wavy boundary; no cultural remains observed.
> **Layer III** 0.60/0.70-2.0/2.10 mbs; (7.5YR3/3, 2.5/3) dry color dark brown mottled very dark brown stony silt clay and few scattered of sub-angular and angular cobble inclusions (20%). No cultural remains observed.



Figure 15. Overview Photograph of TR2 (left) (View to North); Photograph of West Wall at TR2

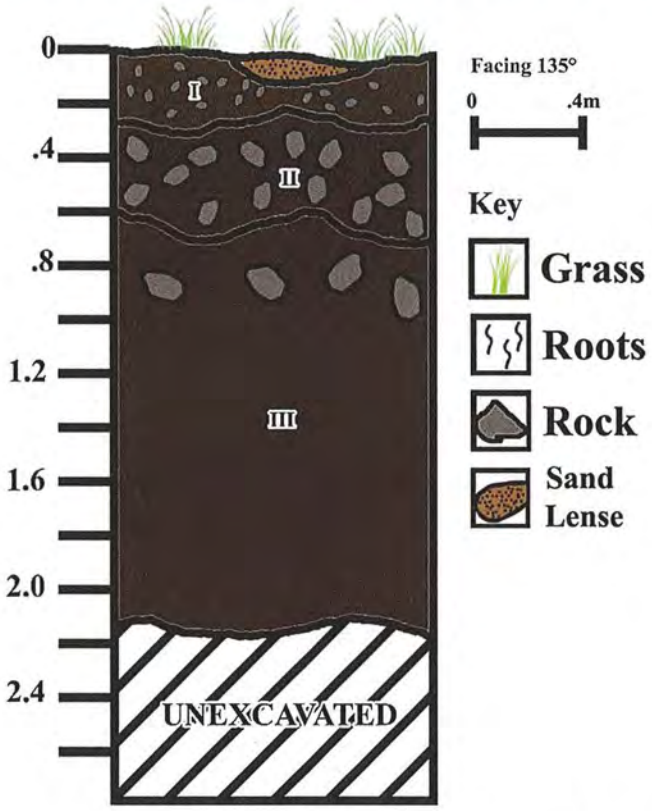


Figure 16. Stratigraphic Profile of West Wall at Trench 2

TRENCH 3

Trench 3 was placed in the east central portion of the parcel and measured 6.7 m long by 1.40 m wide by 2.5/2.6 m deep and oriented 354/174° (see Figure 11 and Table II). The excavations revealed three stratigraphic layers overlying decomposing bedrock which were negative for subsurface remains (Figures 17-19).

Layer I 0 –0.20/0.35 mbs; (7.5YR2.5/2, 2.5/3) agricultural zone, dry color very dark brown gravelly very fine silty loam; common inclusions of rootlets and scattered angular pebbles and cobbles (50%); agricultural material observed intermixed; very abrupt wavy boundary, no cultural remains observed.
Layer II 0.20/0.35-0.60/0.70 mbs; (10YR3/2, 3/3) dry color dark grayish brown silt loam; intermix with large and small sub-angular to angular pebble and cobble scatter(30%); abrupt wavy boundary; no cultural remains observed.
Layer III 0.60/0.70-2.30/2.40 mbs; (10YR3/3,3/4) dry color very dark brown mottled dark brown stony silt clay; very few rootlet and common layers of sub-angular and angular pebble and cobble inclusions (20%); very abrupt wavy boundary. No cultural remains observed.
Layer IV2.30/2.40 mbs; a basal layer; gray mottled grayish brown decomposing to hard bedrock.



Figure 17. Overview Photograph of the Central Portion of Project Area for TR3



Figure 18. Photograph of East Wall at Trench 3

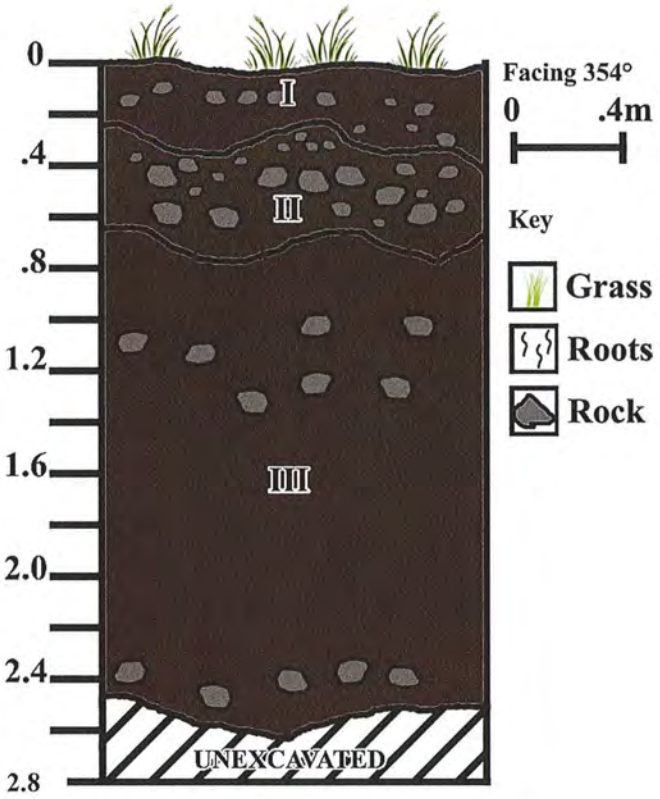


Figure 19. Stratigraphic Profile of East Wall at Trench 3

TRENCH 4

Trench 4 was located in the northeast portion of the parcel and measured 6.5 m long by 1.20 m wide by 2.50 m deep and oriented 180/360° (see Figure 11 and Table II). The excavations revealed three stratigraphic layers overlying bedrock and were negative for buried remains (Figures 20-21).

Layer I 0 –0.30/0.40 mbs; (7.5YR2.5/2, 2.5/3) agricultural zone, dry color very dark brown gravelly very fine silty loam; common inclusions of rootlets and scattered angular pebbles and cobbles (50%); very abrupt wavy boundary, agricultural black plastic and irrigation material observed intermixed; no cultural remains observed.
Layer II 0.30/0.40-1.30/1.40 mbs; (10YR3/2, 3/3) upper portion is disturbed and comprised of dark grayish brown silt loam; intermix with large and small sub-angular to angular pebble and cobble scatter (30%); abrupt wavy boundary; no cultural remains observed.
Layer III1.30/1.40-2.30/2.40 mbs; (10YR3/3, 3/4) dry color very dark brown mottled dark brown stony silt clay; very few rootlet and common layers of sub-angular and angular pebble and cobble inclusions (50%); very abrupt wavy boundary. No cultural remains observed.
Layer IV 2.50 mbs; a basal layer; gray mottled grayish brown decomposing to hard bedrock.



Figure 20. Overview Photograph of TR4 (left); Photograph of East wall at Trench 4

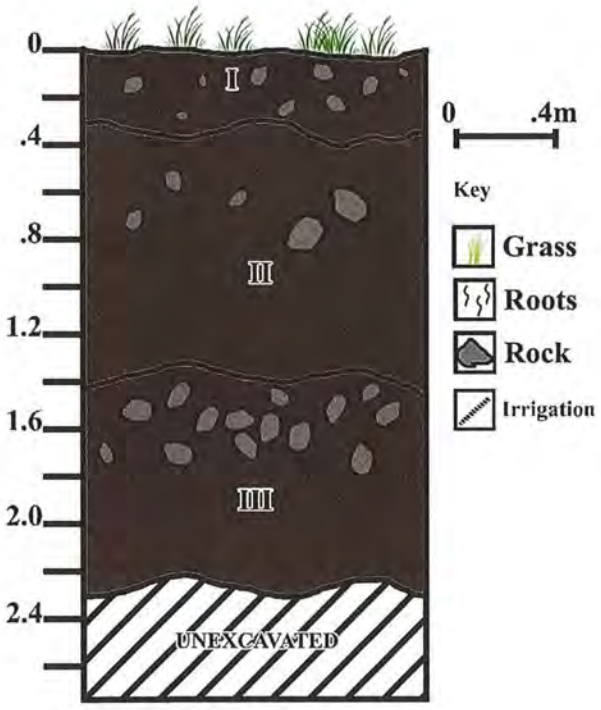


Figure 21. Stratigraphic Profile of East Wall at Trench 4

TRENCH 5

Trench 5 was positioned in the proposed retention basin in the northeast quadrant (see Figure 11 and Table II). It measured 5.6 m long by 1.10 m wide by 2.6 m deep and oriented 180/360°. The excavations revealed four negative stratigraphic layers (Figures 22-24).

Layer I 0 –0.25/0.30 mbs; (10YR,4/2, 3/2) agricultural zone, dark grayish brown gravelly fine silty loam and sand pockets; strong, medium, granular; common rootlet, sub-angular cobble and pebble inclusions (50%); very abrupt boundary, observe agricultural irrigation lines, glass and plastic fragments no; very abrupt wavy boundary.
Layer II 0.25/0.30-0.60/0.65 mbs; (7.5YR3/3, 2.5/3) dark brown mottled very dark brown stony silt loam; well formed, sub-angular blocky peds intermix with sub-angular to angular pebble and cobble inclusions (60%); very abrupt wavy boundary; no cultural remains observed.
Layer III 0.60/0.65-2.15/2.20 mbs; (10YR4/3, 3/3) very dark brown mottled dark brown silt clay; soft, massive poorly formed sub-angular blocks; sub-angular and angular cobble scatter (20%); very abrupt boundary. No cultural remains observed.
Layer IV 2.15/2.20-2.60 mbs; (10YR 3/6, 3/4) dark yellowish brown mottled brown silt clay; weakly, massive medium blocky poorly formed peds; no cultural remains observed.



Figure 22. Overview Photograph of Northeast Portion for TR's 4 and 5



Figure 23. Overview Photograph of Trench 5 (left) (View to South); Photograph of East Wall at TR5

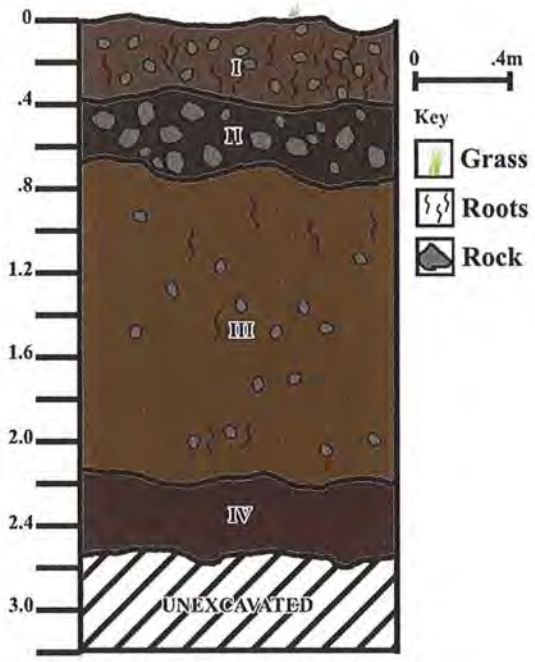


Figure 24. Stratigraphic Profile of East Wall at TR5

TRENCH 6

Trench 6 was located near the northeast corner of the subject area and measured 6.60 m long by 1.20 m wide by 2.40/2.45 m deep and oriented 349/169° (see Figure 11 and Table II). The excavations revealed five stratigraphic layers which were negative for significant subsurface cultural remains (Figures 25-26). Layers I and II revealed previously disturbed layers of agricultural activities, and Layer III appeared to contain an alluvial lens at the interface of Layers II and III.

Layer I 0 –0.60/0.75 mbs; (7.5YR,2.5/2, 2.5/3) fill zone, dry color very dark brown gravelly fine silt loam; well-formed coarse sub-angular block, peds; common rootlet, sub-angular cobble and pebble inclusions (50%); very abrupt boundary, observe agricultural irrigation lines, glass and plastic fragment; very abrupt wavy boundary.
Layer II 0.60/0.75- 1.35/1.40 mbs; (7.5YR3/3, 2.5/3) dry color dark brown mottled very dark brown stony silt loam; well formed, sub-angular blocky peds intermix with sub-angular to angular pebble and cobble inclusions (20%); very abrupt wavy boundary; 0.60 mbs PVC water line observed along southeast corner.
Layer III 1.35/1.40-2.0/2.10 mbs; (10YR4/3, 3/3) dry color very dark brown mottled dark brown silt clay; soft, sub-angular and cobble and pebble inclusions (50%); very abrupt boundary. No cultural remains observed.
Layer IV 2.15/2.20-2.40/2.45 mbs; (10YR 3/6, 3/4) dark yellowish brown mottled brown silt clay; weakly, massive medium blocky poorly formed peds; no cultural remains observed.
Layer V 2.40/2.45 mbs; a basal layer; gray hard and decomposing bedrock.



Figure 25. Overview Photograph of TR6 (left) (View to North); Photograph of East Wall at Trench 6

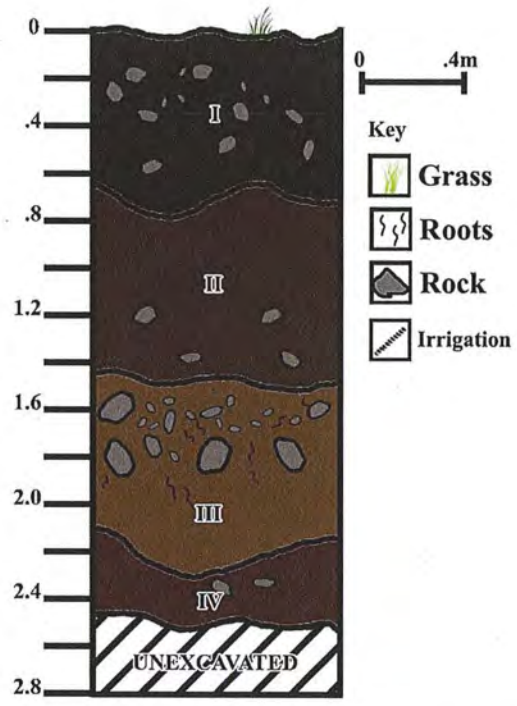


Figure 26. Stratigraphic Profile of East Wall at TR6

TRENCH 7

Trench 7 is located along the southeast portion of the project area and measured 6.2 m long by 1.20 m wide by 2.30 m deep and oriented 286/106° (see Figure 11 and Table II). The excavations revealed two stratigraphic layers which were negative for subsurface cultural remains (Figures 27-29).

Layer I 0-0.30/0.34 mbs; (7.5YR3/4, 3/3) very dark brown gravelly very fine silt; durable sub-angular blocky peds; few inclusions of rootlet intermix with scattered sub-angular and angular pebbles (50%); very abrupt plane boundary, recent historic material of glass, plastic metal fragments observed.

Layer II 0.30/0.34-2.30 mbs; (7.5YR4/1, 3/1) dark brown mottled very dark gray stony silt clay; slightly hard, poorly formed sub-angular block intermix with very few rootlet, no cultural remains observed.



Figure 27. Overview Photograph of the Southeast Corner and Proposed Trench 7



Figure 28. Photograph of North Wall at Trench 7

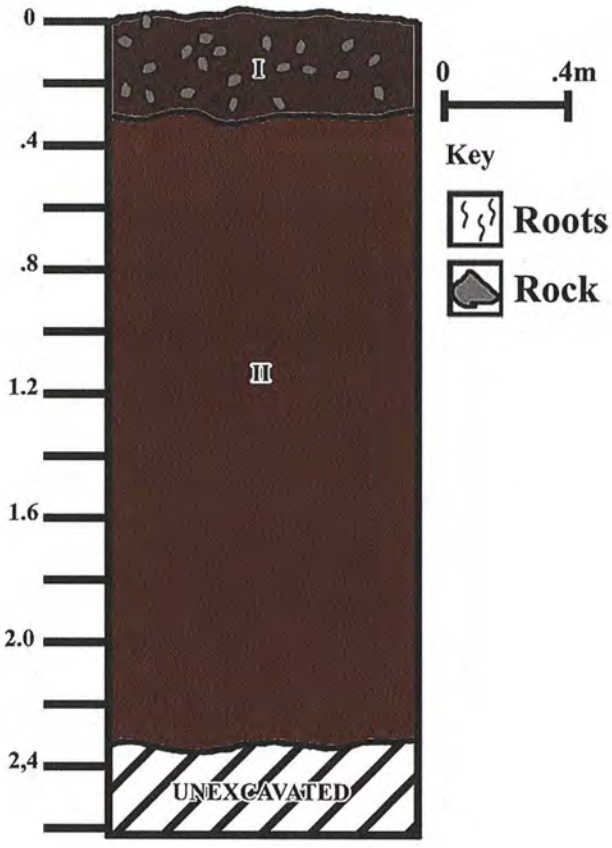


Figure 29. Stratigraphic Profile of West Wall at TR7

TRENCH 8

Trench 8 is located in the southeast corner of the parcel and measured 6.0 m long by 1.20 m wide by 2.20 m deep and oriented 251/71° (see Figure 11 and Table II). The excavations revealed four stratigraphic layers overlying bedrock (Figures 30 and 31).

Layer I 0 –0.15/0.20 mbs; (10YR/4/2, 3/2) agricultural zone, dark grayish brown gravelly fine silty loam; strong, medium, granular; common rootlet, sub-angular cobble and pebble inclusions (40%); very abrupt boundary, observe agricultural irrigation lines, glass and plastic fragments; very abrupt wavy boundary.
Layer II 0.15/0.20-0.40/0.50 mbs; (10YR5/1, 5/2) dry color gray mottled grayish brown stony silt loam; well formed, sub-angular blocky peds intermix with sub-angular to angular pebble and cobble inclusions (50%); very abrupt wavy boundary; no cultural remains observed.
Layer III 0.40/0.50-1.10/1.20 mbs; (7.5YR3/2, 2.5/3) dry color dark brown mottled very dark brown silt clay; soft, massive poorly formed sub-angular blocks; sub-angular and angular pebble scatter (15%); very abrupt boundary. No cultural remains observed.
Layer IV 1.10/1.20-2.20 mbs; (10YR 4/3, 3/3) brown mottled dark brown silt clay; weakly, massive medium blocky poorly formed peds; no cultural remains observed.
Layer V (2.10/2.20 mbs) (10YR5/1, 4/2) gray mottled grayish brown and saprolytic/decomposing bedrock.



Figure 30. Overview Photograph of TR 8 (left) (View to West); Photograph of North Wall at TR 8 (right)

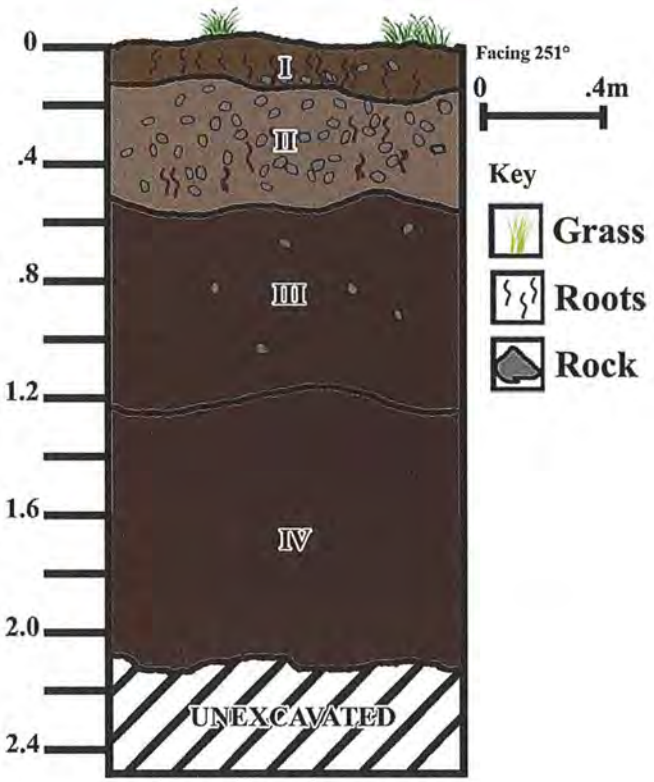


Figure 31. Stratigraphic Profile of North Wall at TR8

TRENCH 9

Trench 9 is located within the parking area of temporary offices along the northeast corner of project area (see Figure 11 and Table II). It measured 4.30 m long by 1.30 m wide by 1.55/1.80 m deep, oriented 90/270° and was negative for cultural remains. The excavations revealed four strata where Layers I and II were previously disturbed by recent developmental activities and a sand lens at Layer III (Figures 32 and 33).

Layer I 0 –0.30/0.35 mbs; (10YR/5/2) gravel fill zone, dark grayish brown gravelly fine silt loam; strong, medium, granular; few rootlet, common sub-angular gravel and pebble inclusions (50%); very abrupt boundary, observe water and electrical lines with sparse sand, very abrupt wavy boundary.

Layer II 0.30/0.35-0.55/0.60 mbs; (7.2YR4/3, 4/4) brown gravelly silt loam; well formed, sub-angular blocky peds few rootlet inclusions intermix with scattered sub-angular to angular pebble and gravel (30%); very abrupt wavy boundary; no cultural remains observed.

Layer III 0.55/0.60-0.70/0.75 mbs; (10YR5/6, 6/6) yellowish brown mottled brown fine sand; structureless fine to coarse single grain; very abrupt wavy irregular boundary; No cultural remains observed.

Layer IV 0.70/0.75-1.60/1.70 mbs; (7.5YR 4/3, 3/3) brown mottled dark brown stony silt clay; weakly, massive medium blocky well formed peds; sub-angular boulder and cobble scatter (30%); very abrupt clear boundary. no cultural remains observed.



Figure 32. Overview Photograph of TR9 with Water line in Foreground (View to West) (left); Photograph of South Wall at TR9 (after utility line was removed, note thin sand lens (red arrows)

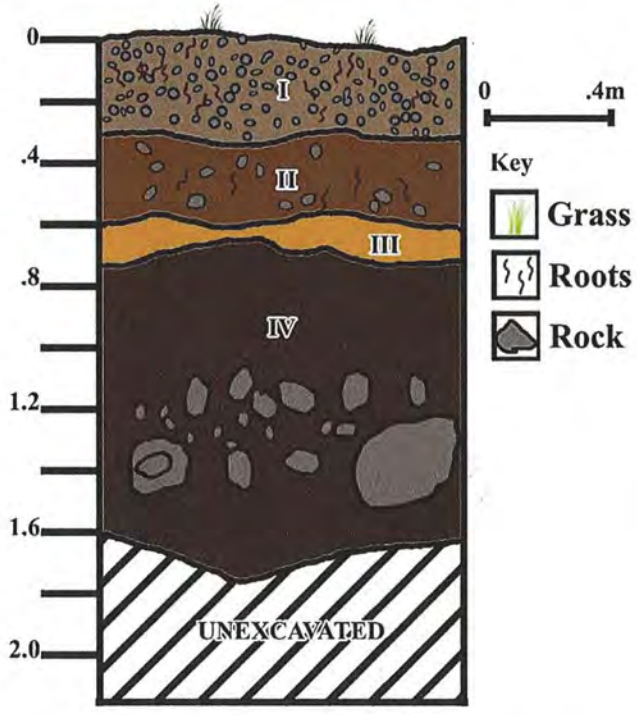


Figure 33. Stratigraphic Profile of South Wall at TR9

TRENCH 10

Trench 10 is located in the southwest quadrant of the subject parcel and measured 5.5 m long by 1.30 m wide by 1.70/1.80 m deep and oriented 90/270° (see Figure 11 and Table II). The excavations revealed three stratigraphic layers overlying saprolytic bedrock and all were negative (Figures 34-36).

Layer I 0 –0.30/0.40 mbs; (7.5YR3/2,3/3) fill zone, dry color dark brown gravelly fine silt loam; strong, medium, granular; common rootlet, common sub-angular gravel and pebble inclusions (40%); very abrupt boundary, observe irrigation lines, very abrupt wavy boundary.
Layer II 0.30/0.40-1.35/1.40 mbs; (7.2YR4/3,3/3) dry color dark brown mottled brown stony silt loam; well formed, sub-angular blocky peds few rootlet inclusions intermix with scattered sub-angular to angular pebble and gravel (40%); very abrupt wavy boundary; no cultural remains observed.
Layer III 1.35/1.40-1.71/1.75 mbs; (5YR4/4, 4/6) dry color reddish brown mottled yellowish red; prismatic sub-angular blocky peds; very abrupt boundary; No cultural remains observed.
Layer IV 1.70/1.75 mbs; (10YR5/1, 4/2) gray mottled grayish brown decomposing bedrock.



Figure 34. Overview Photograph of Southwest Area Showing Location for TR10



Figure 35. Photograph of North Wall at TR10

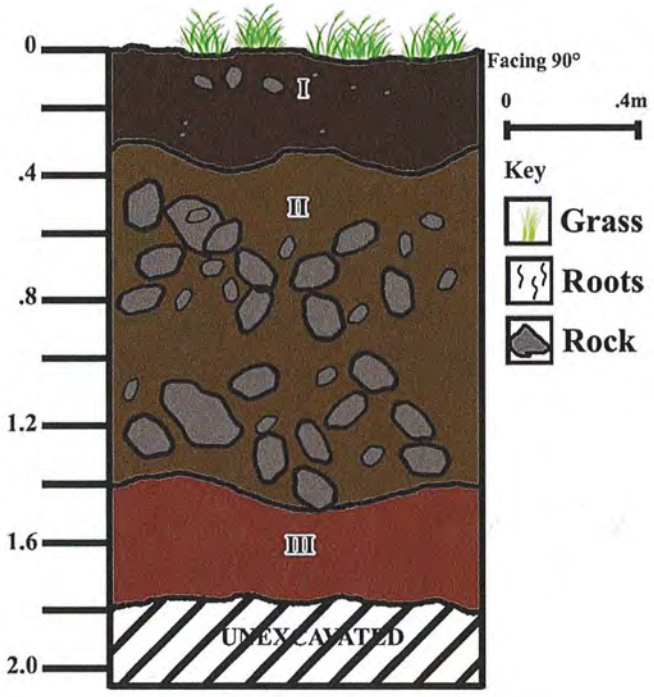


Figure 36. Stratigraphic Profile of North Wall at Trench 10

TRENCH 11

Trench 11 is located along the west, central boundary and measured 6.0 m long by 1.10 m wide by 1.70/1.80 m deep and was oriented 180/360° (see Figure 11 and Table II). The excavations revealed two stratigraphic layers that were negative for subsurface cultural remains (Figures 37 and 38).

Layer I 0 –0.30/0.40 mbs; (7.5YR3/2, 3/3) fill zone, dark brown gravelly fine silt loam; strong, medium, granular; common rootlet, common sub-angular gravel and pebble inclusions (40%); very abrupt boundary, observe irrigation lines, very abrupt wavy boundary.
Layer II 0.30/0.40-1.35/1.40 mbs; (7.2YR4/3, 3/3) dry color dark brown mottled brown stony silt loam; well formed, sub-angular blocky peds few rootlet inclusions intermix with scattered sub-angular to angular pebble and gravel (50%); very abrupt wavy boundary; no cultural remains observed.



Figure 37. Overview Photograph of TR11 (View to North) (left); Photograph of West Wall at Trench 11

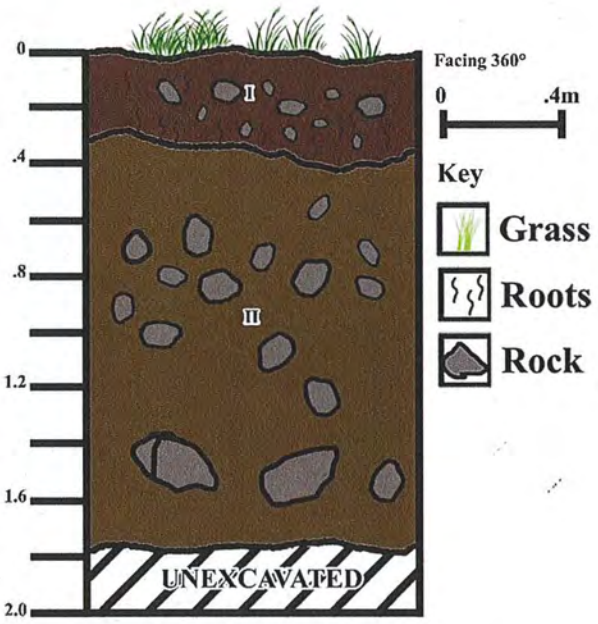


Figure 38. Stratigraphic Profile of West Wall at Trench 11

DISCUSSION AND RECOMMENDATIONS

An archaeological assessment was performed of a 15.0 acre parcel proposed for affordable residential development under the 201H permit process. The subject area has been extensively altered through the construction of a wide drainage trench on the western, sugar cane cultivation and past sand mining activities, where no evidence of traditional occupation and/or inland sand dune deposits appear to be extant. Despite these alterations, the subject parcel is positioned within a culturally sensitive area, and in close proximity to traditional burial features designated Sites 50-50-04-2916, 5965, 5966, 5680, 6261 and 6573; and a few historic period sites consisting of an historic road bed-Site 5963, a sugar cane flume-Site 5967 and Kama Ditch-Site 5474; thus subsurface testing was implemented.

A total of 11 mechanical test trenches were conducted at the project area, where the majority were placed in the eastern portion to ascertain the presence/absence of subsurface historic properties and remnant sand dune deposits. The trenches exhibited disturbances from 0.60 mbs to 1.85 mbs with bedrock encountered from 1.6 mbs to 2.30 mbs and all were negative for buried cultural remains and intact sand dune matrices.

No historic properties were identified during the subsurface investigations, and these negative results may be due to the compounded disturbances across the parcel. Pursuant to HAR §13-284-7, the overall development plan for the parcel will have no effect on significant historic properties. However, given that the subject parcel is in close proximity to known, unmarked traditional sand burials (east of the project area), the proposed mitigation pursuant to HAR §13-284-8 (1) (A) will comprise data recovery in the form of archaeological monitoring. Prior to the commencement of construction activities, an archaeological monitoring plan (AMP) will be prepared and submitted to SHPD for review and approval.

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APPENDIX E

CULTURAL IMPACT ASSESSMENT

SCS Project Number 2114-CIA-1

A CULTURAL IMPACT ASSESSMENT REPORT IN ADVANCE OF THE PROPOSED WAILUKU AFFORDALE HOUSING PROJECT

WAILUKU AND WAIKAPŪ AHUPUA'A, WAILUKU DISTRICT ISLAND OF MAUI, HAWAI'I

[TMK: (2) 3-5-001:064]

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March 2018

FINAL

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INTRODUCTION

At the request of Legacy Wailuku LLC, Scientific Consultant Services (SCS), Inc., has prepared a Cultural Impact Assessment (CIA) in advance of the proposed Waikapu Affordable Housing Project. The proposed project will be located in Wailuku, Wailuku and Waikapū Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2) 3-5-001:064] (Figures 1 through 3). The proposed project area consists of a total of approximately 14.416-acre property, which is owned by Kehalani Agricultural Investors LLC.

The Hawaii State Office of Environmental Quality Control (OEQC 1997:11) states that "an environmental assessment of cultural impacts" gathers information about cultural practices and cultural features that may be affected by significant environmental effects:

> Cultural impacts differ from other types of impacts assessed in environmental assessments or environmental impact statements. A cultural impact assessment includes information relating to the practices and beliefs of a particular cultural or ethnic group or groups.

The purpose of a Cultural Impact Assessment is to identify the possibility of previous and current cultural practices and resources within a project area and ahupua'a, and then to assess the potential for impacts to these cultural resources.

PROJECT DESCRIPTION

The proposed consists of a 324-unit apartment project will include a recreation center, swimming pool, and three children's play areas. Of the 324 units, 194 will be workforce rentals for families and the remaining 130 units will be unrestricted rentals.

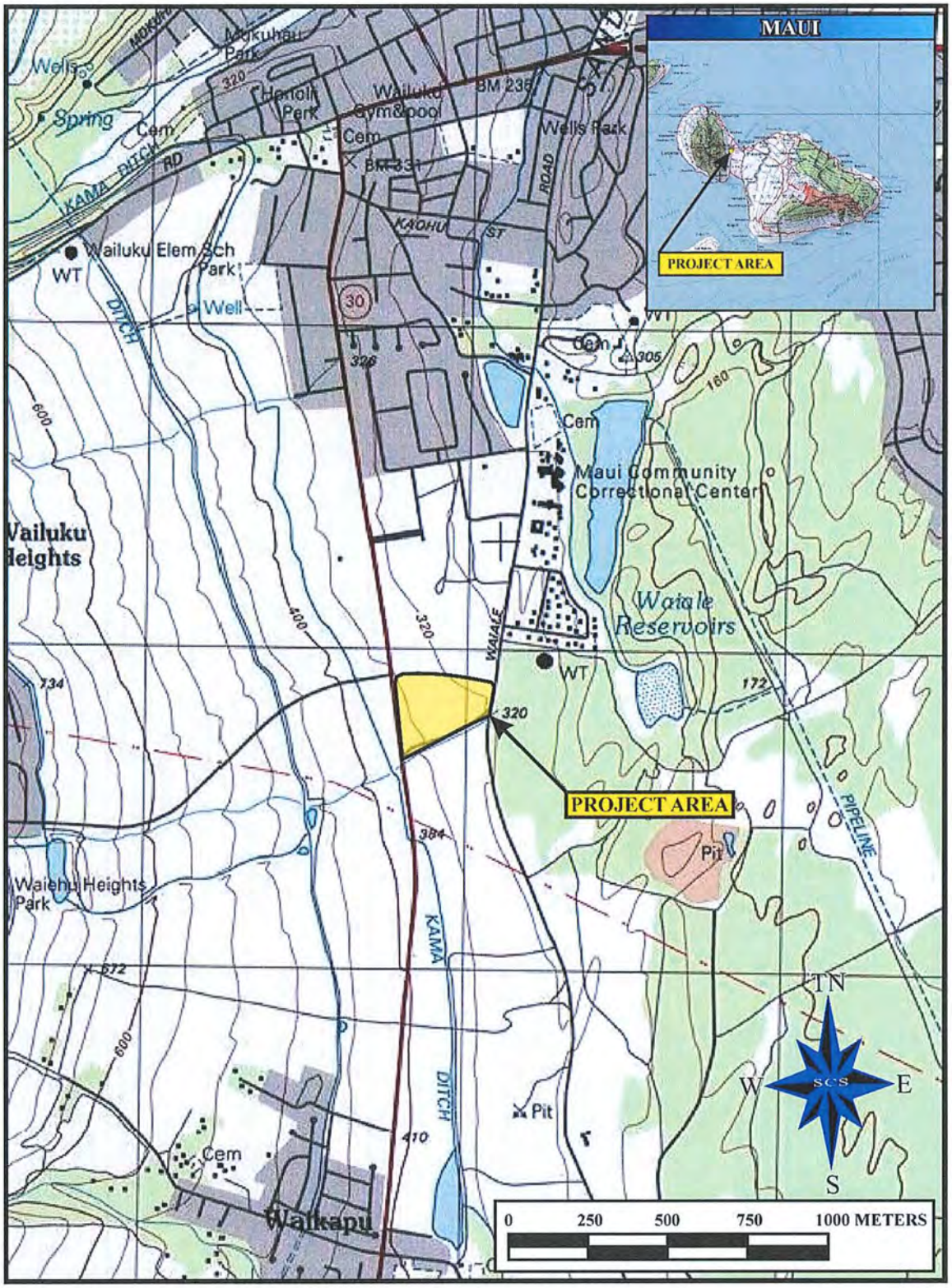


Figure 1: USGS (Wailuku, HI 1997; 1:24,000) Quadrangle Map Showing Proposed Project Area Location.

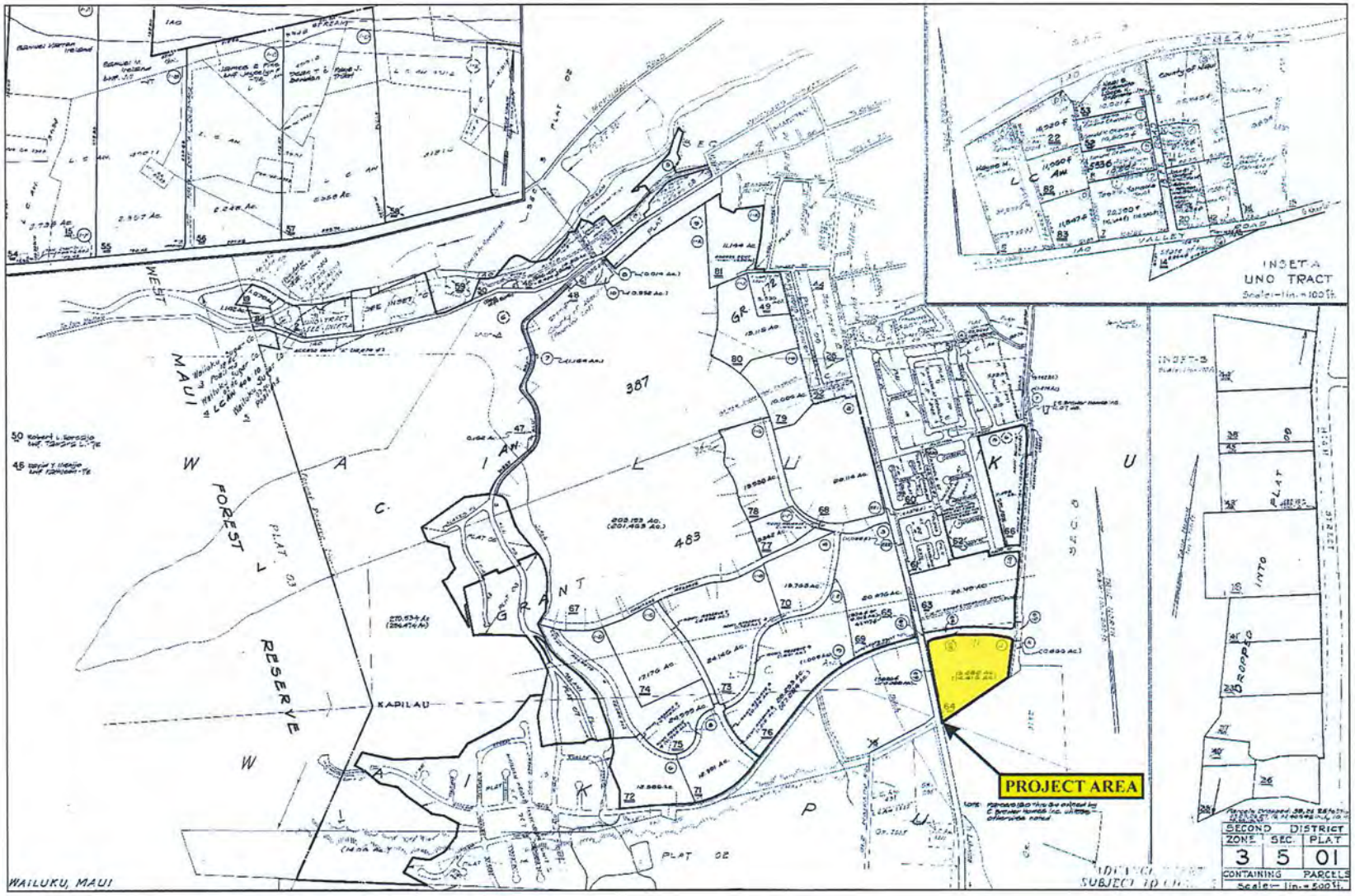


Figure 2: Tax map Key [TMK: (2) 3-5-001] Showing Proposed Project Area Location.



Figure 3: Aerial Photograph (Google Earth Image 2017; Imagery Date 1/12/2013) Showing Proposed Project Area Location.

CULTURAL IMPACT ASSESSMENT METHODOLOGY

The Constitution of the State of Hawai'i clearly states the duty of the State and its agencies is to preserve, protect, and prevent interference with the traditional and customary rights of native Hawaiians. Article XII, Section 7 (2000) requires the State to "protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by *ahupua'a* tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778." Additionally, Article IX and XII, of the state constitution, other state laws, and the courts of the State, impose on government agencies a duty to promote and protect cultural beliefs and practices, and resources of Native Hawaiians as well as other ethnic groups.

Kamehameha III (Kauikeaouli) preserved the peoples traditional right to subsistence. As a result, in 1850, the Hawaiian Government confirmed the traditional access rights to native Hawaiian ahupua'a tenants to gather specific natural resources for customary uses from undeveloped private property and waterways under the Hawaiian Revised Statutes (HRS) 7-1. In 1992, the State of Hawai'i Supreme Court, reaffirmed HRS 7-1 and expanded it to include, "native Hawaiian rights...may extend beyond the ahupua'a in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner" [Pele Defense Fund v. Paty, 73 Haw.578, 620, 837 P.2d 1247, 1272 (1992)].

Act 50, enacted by the Legislature of the State of Hawai'i (2000) with House Bill (HB) 2895, relating to Environmental Impact Statements, proposes that:

> ...there is a need to clarify that the preparation of environmental assessments or environmental impact statements should identify and address effects on Hawaii's culture, and traditional and customary rights... [H.B. NO. 2895].

Act 50 also requires state agencies and other developers to assess the effects of proposed land use or shoreline developments on the "cultural practices of the community and State" as part of the HRS Chapter 343 (2001) environmental review process.

It also re-defined the definition of "significant effect" to include "the sum of effects on the quality of the environment including actions that impact a natural resource, limit the range of beneficial uses of the environment, that are contrary to the State's environmental policies, or adversely affect the economic welfare, social welfare or cultural practices of the community and State." Cultural resources can include a broad range of often overlapping categories,

including places, behaviors, values, beliefs, objects, records, stories, etc. (H.B. 2895, Act 50, 2000).

The purpose of a CIA is to identify the possibility of on-going cultural activities and resources within a project area, or its vicinity, and then assessing the potential for impacts on these cultural resources. The CIA is not intended to be a document of in depth archival-historical land research, or a record of oral family histories, unless these records contain information about specific cultural resources that might be impacted by a proposed project.

GEOGRAPHICAL EXTENT

As defined by the Hawaii State Office of Environmental Quality Control (OEQC 1997:11), the geographical extent should be greater than the area over which the proposed project will take place in order to ensure that cultural practices that occur outside of the project area, but which may still be affected, are included in the assessment. For example, a project that may not, itself, physically impact traditional gathering practices, but may block access to those locations would be included within the assessment. The concept of geographical expansion is recognized by using, as an example, "the broad geographical area, e.g. district or *ahupua'a.*" In some cases, the geographical extent could extend beyond the *ahupua'a* if cultural practices do so as well.

OEQC GUIDELINES FOR ASSESSING CULTURAL IMPACTS

According to the Guidelines for Assessing Cultural Impacts established by the Hawaii State Office of Environmental Quality Control (OEQC 1997:12):

> The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religions and spiritual customs. The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man made and natural, which support such cultural beliefs.

The meaning of "traditional" was explained by in *National Register Bulletin*:

> "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations', usually orally or through practice. The traditional cultural significance of a historic property then is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. . . . [Parker and King 1998:1]

This CIA was prepared as much as possible in accordance with the suggested methodology and content protocol in the Guidelines for Assessing Cultural Impacts (OEQC 1997:11-13). In outlining the "Cultural Impact Assessment Methodology", the OEQC (1997:11) states that:

> "...information may be obtained through scoping community meetings, ethnographic interviews and oral histories..."

This Cultural Impact Assessment was prepared in accordance with the Guidelines for Assessing Cultural Impacts (OEQC 1997:11-13). The Guidelines recommend that preparers of assessments analyzing cultural impacts adopt the following protocol:

1. Identify and consult with individuals and organizations with expertise concerning the types of cultural resources, practices and beliefs found within the broad geographical area, e.g., district or ahupua'a;

2. Identify and consult with individuals and organizations with knowledge of the area potentially affected by the proposed action;

3. Receive information from or conduct ethnographic interviews and oral histories with persons having knowledge of the potentially affected area;

4. Conduct ethnographic, historical, anthropological, sociological, and other culturally related documentary research;

5. Identify and describe the cultural resources, practices and beliefs located within the potentially affected area; and

6. Assess the impact of the proposed action. alternatives to the proposed action, and mitigation measures, on the cultural resources, practices and beliefs identified.

CULTURAL IMPACT ASSESSMENT CONTENTS

The Guidelines state that an assessment of cultural impacts should address, but not be limited to:

A. Discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and features associated with the project area, including any constraints or limitations which might have affected the quality of the information obtained.

B. Description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken.

C. Ethnographic and oral history interview procedures, including the circumstances under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained.

D. Biographical information concerning the individuals and organizations consulted their particular expertise and their historical and genealogical relationship to the project area, as well as information concerning the persons submitting information or interviewed their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the project area.

E. Discussion concerning historical and cultural source materials consulted, the institutions and repositories searched and the level of effort undertaken. This discussion should include, if appropriate, the particular perspective of the authors, any opposing views, and any other relevant constraints, limitations or biases.

F. Discussion concerning the cultural resources, practices and beliefs identified, and, for resources and practices, their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the project site.

G. Discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area affected directly or indirectly by the proposed project.

H. Explanation of confidential information that has been withheld from public disclosure in the assessment.

I. Discussion concerning any conflicting information in regard to identified cultural resources, practices and beliefs.

J. Analysis of the potential effect of any proposed physical alteration on cultural resources, practices or beliefs; the potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.

K. A bibliography of references, and attached records of interviews which were allowed to be disclosed.

If on-going cultural activities and/or resources are identified within the project area, assessments of the potential effects on the cultural resources in the project area and recommendations for mitigation of these effects can be proposed.

PROJECT METHODOLOGY

This report contains archival and documentary research, as well as communication with organizations and individuals having knowledge of the project area, its cultural resources, and its practices and beliefs. An example of the initial letter of inquiry is presented in Appendix A

and an example of the follow up letter is presented in Appendix. This Cultural Impact Assessment was prepared in accordance with the suggested methodology and content protocol provided in the Guidelines for Assessing Cultural Impacts (OEQC 1997:13), whenever possible. The assessment concerning cultural impacts may include, but not be limited to archival research and interviews.

ARCHIVAL RESEARCH

Archival research focused on a historical documentary study involving both published and unpublished sources. These included legendary accounts of native and early foreign writers; early historical journals and narratives; historic maps, land records, such as Land Commission Awards, Royal Patent Grants, and Boundary Commission records; historic accounts, and previous archaeological reports.

Historical and cultural source materials were extensively used and can be found listed in the References Cited portion of this report. Such scholars as Samuel Kamakau, Martha Beckwith, Jon J. Chinen, Lilikalā Kame'eleihiwa, R. S. Kuykendall, Marion Kelly, E. S. C. Handy and E.G. Handy, John Papa ʻĪʻī, Gavin Daws, A. Grove Day, and Elspeth P. Sterling and Catherine C. Summers, and Mary Kawena Puku'i and Samuel H. Elbert continue to contribute to our knowledge and understanding of Hawai'i, past and present. The works of these and other authors were consulted and incorporated in this report where appropriate. Land use document research was supplied by the Waihona 'Aina (2017) Database and the Honolulu's Real Property Assessment and Tax Billing Information website.

INTERVIEWS

Interviews are conducted in accordance with Federal and State laws and guidelines when knowledgeable individuals are able to identify cultural practices in, or in close proximity to, the project area. If they have knowledge of traditional stories, practices and beliefs associated with a project area or if they know of historical properties within the project area, they are sought out for additional consultation and interviews. Individuals who have particular knowledge of traditions passed down from preceding generations and a personal familiarity with the project area are invited to share their relevant information concerning particular cultural resources. Often people are recommended for their expertise, and indeed, organizations, such as Hawaiian Civic Clubs, the Island Branch of Office of Hawaiian Affairs (OHA), historical societies, Island Trail clubs, and Planning Commissions are depended upon for

their recommendations of suitable informants. These groups are invited to contribute their input and suggest further avenues of inquiry, as well as specific individuals to interview. It should be stressed again that this process does not include formal or in-depth ethnographic interviews or oral histories as described in the OEQC's *Guidelines for Assessing Cultural Impacts* (1997). The assessments are intended to identify potential impacts to ongoing cultural practices, or resources, within a project area or in its close vicinity.

If knowledgeable individuals are identified, personal interviews are sometimes taped and then summarized. These draft summaries are returned to each of the participants for their review and comments. After corrections are made, each individual is to sign an information release form, making the interview available for this study. When telephone interviews occur, a summary of the information is also sent for correction and approval, or dictated by the informant and then incorporated into the document. If no cultural resource information is forthcoming and no knowledgeable informants are suggested for further inquiry, interviews are not conducted.

KA PA'A KAI O KA'AINA V. LAND USE COMMISSION, STATE OF HAWAI'I

The Land Use Commission (LUC) is also required to apply the analytical framework set forth by the Hawaii Supreme Court in Ka Pa'akai O Ka'Aina v. Land Use Comm'n, State of Hawai'i, 94 Hawai'i 31, 7 P.3d 1068 (2000) (hereinafter, "***Ka Pa'akai***"). In this case, a coalition of native Hawaiian community organizations challenged an administrative decision by the Land Use Commission to reclassify nearly 1,010 acres of land from conservation to urban use, to allow for the development of a luxury project including upscale homes, a golf course, and other amenities. The native Hawaiian community organizations appealed, arguing that their native Hawaiian members would be adversely affected by the LUC's decision because the proposed development would infringe upon the exercise of their traditional and customary rights. Noting that "[a]rticle XII, section 7 of the Hawaii Constitution obligates the LUC to protect the reasonable exercise of customarily and traditionally exercised rights of native Hawaiians to the extent feasible when granting a petition for reclassification of district boundaries," the Hawai'i Supreme Court held that the LUC did not provide a sufficient basis to determine "whether [the agency] fulfilled its obligation to preserve and protect customary and traditional rights of native Hawaiians" and, therefore, the LUC "failed to satisfy its statutory and constitutional obligations." Ka Pa'akai, 94 Hawai'i at 46, 53, 7 P.3d at 1083, 1090.

The Hawai'i Supreme Court in Ka Pa'akai provided an analytical framework in an effort to effectuate the State's obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests. In order to fulfill its duty to preserve and protect customary and traditional native Hawaiian rights to the extent feasible, the LUC must—at a minimum—make specific findings and conclusions as to the following:

1. the identity and scope of "valued cultural, historical, or natural resources" in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;

2. the extent to which those resources--including traditional and customary native Hawaiian rights--will be affected or impaired by the proposed action; and

3. the feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian rights if they are found to exist.

See Ka Pa'akai, 94 Hawai'i at 47, 7 P.3d at 1084.

To fulfill these purposes outlined by Ka Pa'akai, the Cultural Impact Assessment has reviewed historical research and suggestions from contacts knowledgeable about traditional cultural practices which were conducted within the project area corridor and in the surrounding environs. The potential effect of the proposed project on cultural resources, practices or beliefs, its potential to isolate cultural resources, practices or beliefs from their setting, and the potential of the project to introduce elements which may alter the setting in which cultural practices take place has been analyzed, as required by the OEQC (1997).

ENVIRONMENTAL SETTING

The island of Maui ranks second in size of the eight main islands in the Hawaiian Archipelago. The Island was formed by two volcanoes, Mount Kukui in the west and Haleakalā in the east. Pu'u Kukui, forming the west end of the island (1,215 m above mean sea level), is composed of large, heavily eroded amphitheater valleys that contain well-developed permanent stream systems that watered fertile agricultural lands extending to the coast. The deep valleys of West Maui and their associated coastal regions have been witness to many battles in ancient times and were coveted productive landscapes. These are joined together by an isthmus containing dry, open country (*kula*), which includes a portion of the lands within Wailuku District.

PROJECT AREA

The proposed project area is located in the city of Wailuku, Wailuku and Waikapū Ahupua'a, Wailuku District, Maui Island, Hawai'i. Kuikahi Drive forms the northern project area boundary, Honoapiilani Highway and Waiale Road form the west and east boundaries, respectively. The southern boundary is formed by an irrigation ditch, which appears to be a portion of the Kama Ditch, State Site 50-50-04-5474. The proposed project area is situated on the western edge of the isthmus, approximately 2.5 miles inland from Kahului Harbor at an elevation of 320 to 360 feet above mean sea level (amsl).

SOILS

According to Foote *et al.* (1972: Sheet Number 100; Figure 4) two soil types representing the Iao Soil Series are present within the proposed project area (see Figure 4). Iao clay, 3 to 7 percent slopes (IcB) comprise the western portion, while Iao silty clay, 0 to 3 (IaA) percent slopes comprise the eastern portion of the proposed project area.

In general, the well-drained volcanic soils of the Iao Series occur on valley fill and alluvial fans between 100 to 500 feet amsl in areas receiving 25 to 4 inches of rainfall annually (Foote *et al.* 1972: 46). The IcB soils, in a representative profile, exhibit a 15-inch surface layer composed of dark-brown clay; a 45-inch subsurface layer composed of very dark brown, dark-brown, and very dark greyish-brown clay and silty clay. The substratum is composed of clayey alluvium (Foote *et al.* 1972: 46). The IcB soils exhibit moderately slow permeability, medium runoff, and a slight to moderate erosion hazard. These soils are used for the cultivation of sugarcane and as residential sites (Foote *et al.* 1972: 46). The IaA soils exhibit slow runoff and a slight erosion hazard and are utilized for the cultivation of sugarcane (Foote *et al.* 1972: 46-47).

CLIMATE

According to (Armstrong 1980:64), the project area exhibits a temperate climate with summer temperatures ranging from the high 60s to the low 90s (degrees Fahrenheit) in the summer months. During winter months, the temperature in the project area ranges around 50s to 90 degrees (Fahrenheit). Giambelluca *et al.* (2013) indicate the project area receives approximately 24 inches of rainfall annually.

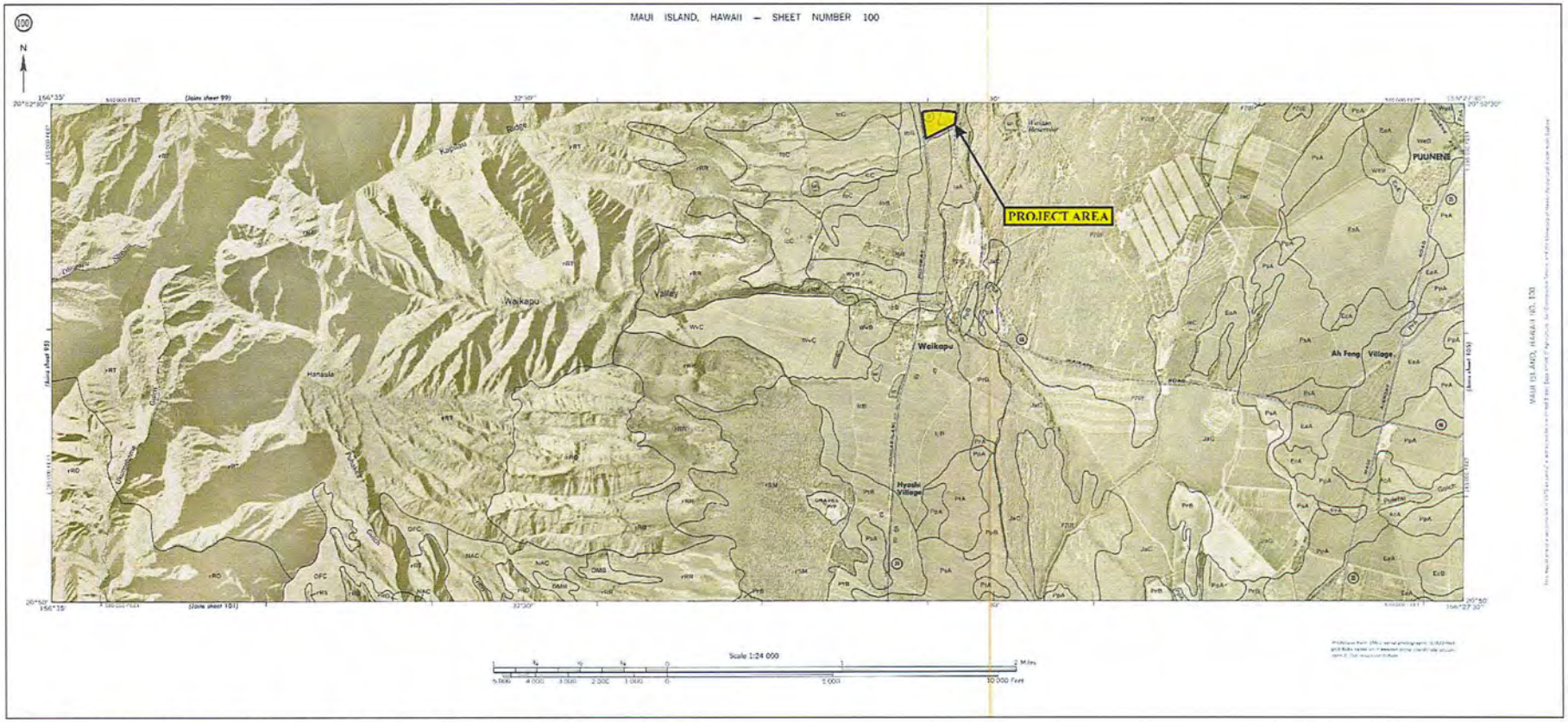


Figure 4: USDA (Foote *et al.* 1972; Sheet Number 100) Showing Soil Types Within the Proposed Project Area.

TRADITIONAL AND CULTURAL HISTORICAL CONTEXT

Archaeological settlement pattern data suggests that initial colonization and occupation of the Hawaiian Islands first occurred on the windward shoreline areas of the main islands between A. D. 850 and 1100, with populations eventually settling in drier leeward areas during later periods (Kirch 2011). Although coastal settlement was dominant, native Hawaiians began cultivating and living in the upland *kula* (plains) zones. Greater population expansion to inland areas began around the 14th century and continued through the 16th century. Large scale or intensive agriculture was implemented in association with habitation, religious, and ceremonial activities.

In Hawai'i, much of the coastal lands were preferred for chiefly residence. Easily accessible resources such as offshore and onshore fishponds, the sea with its fishing and surfing—known as the sports of kings, and some of the most extensive and fertile wet taro lands were located in the coastal areas (Kirch and Sahlins, 1992 Vol. 1:19). Inland resources necessary for subsistence could easily be brought to the *ali'i* residences on the coast from nearby inland plantations. The majority of farming was situated in the lower portions of stream valleys where there were broader alluvial flat lands or on bends in the streams where alluvial terraces could be modified to take advantage of the stream flow. Dry land cultivation occurred in colluvial areas at the base of gulch walls or on flat slopes (Kirch 1985; Kirch and Sahlins 1992, Vol. 2:59).

PAST POLITICAL BOUNDARIES

Approximately 600 years ago, the Hawaiian population had expanded throughout the Hawaiian Islands to a point where large, political districts could be formed (Lyons 1903; Kamakau 1991; Moffat and Fitzpatrick 1995). During the pre-Contact Period, Maui was divided into twelve districts or *moku* (Sterling 1998:3). Following the Civil Code of 1859, the twelve districts were consolidated into four districts: Lāhainā, Wailuku, Makawao, and Hāna (Sterling 1998:3). Traditionally, the division of Maui A Example Letter of Inquiry Island into districts (*moku*) and sub-districts was performed by a *kahuna* (priest, expert) named Kalaiha'ōhia, during the time of the *ali'i* Kaka'alaneo (Beckwith 1940:383; Fornander 1919-1920, Vol. 6:248) places Kaka'alaneo at the end of the 15th century or the beginning of the 16th century. Land was considered the property of the king or *ali'i 'ai moku* (the *ali'i* who eats the island/district), which he held in trust for the gods. The title of *ali'i 'ai moku* ensured rights and responsibilities

pertaining to the land, but did not confer absolute ownership. The king kept the parcels he wanted, his higher chiefs received large parcels from him and, in turn, distributed smaller parcels to lesser chiefs. The *maka'āinana* (commoners) worked the individual plots of land.

In general, several terms, such as *moku*, *ahupua'a*, *'ili* or *'ili 'āina* were used to delineate various land sections. A district (*moku*) contained smaller land divisions (*ahupua'a*) which customarily continued inland from the ocean and upland into the mountains. Extended household groups living within the *ahupua'a* were therefore, able to harvest from both the land and the sea. Ideally, this situation allowed each *ahupua'a* to be self-sufficient by supplying needed resources from different environmental zones (Lyons 1875:111). The *'ili 'āina* or *'ili* were smaller land divisions next to importance to the *ahupua'a* and were administered by the chief who controlled the *ahupua'a* in which it was located (Lyons 1875:33; Lucas 1995:40). The *mo'o'āina* were narrow strips of land within an *'ili*. The land holding of a tenant or *hoa 'āina* residing in an *ahupua'a* was called a *kuleana* (Lucas 1995:61).

Wailuku District inhabits the eastern side of the West Maui Mountains (Mauna Kahalawai) and occupies the isthmus through the center of the island to coastal reaches in Kahuku and Mā'alaea. Wailuku, together with Waikapū, Waihe'e, and Waiehu, is one of the Nā Wai 'Ehā, or "the four waters," known for the occupancy of chiefly individuals (Kame'eleihiwa 1992; Pukui and Elbert 1992; and Creed 1993). Wailuku District and Wailuku Ahupua'a are frequently mentioned in historical texts and oral traditional accounts as being politically, ceremonially, and geographically important areas during traditional times (Cordy 1981, 1996; Kirch 1985). Wailuku was considered a "chiefly center" (Sterling 1998:90) with many of the chiefs and much of the area's population residing near or within portions of 'Īao Valley and lower Wailuku. The many *heiau* constructed in the Wailuku area point to its ceremonial and religious importance during the pre-Contact Period (pre-1778). During the Historic Period (post-1778), after numerous battles in the area, the large concentration of Land Commission Awards granted in Wailuku, particularly in lower 'Īao Valley, also attest to a sizeable population base and the importance of the lands for cultivation through time. More recent land use in the area included sugar cane cultivation and use of the land for pasture.

TRADITIONAL SETTLEMENT PATTERNS

The Hawaiian economy was based on agricultural production and marine exploitation, as well as raising livestock and collecting wild plants and birds. Extended household groups settled in various *ahupua'a*. During pre-Contact times, there were primarily two types of

agriculture, wetland and dry land, both of which were dependent upon geography and physiography. River valleys provided ideal conditions for wetland *kalo* (*Colocasia esculenta*) agriculture that incorporated pond fields and irrigation canals. Other cultigens, such as *kō* (sugar cane, *Saccharum officinaruma*) and *mai'a* (banana, *Musa* sp.), were also grown and, where appropriate, such crops as *'uala* (sweet potato, *Ipomoea batatas*) were produced. This was the typical traditional agricultural pattern seen on all the Hawaiian Islands (Kirch and Sahlins 1992, Vol. 1:5, 119; Kirch 1985). Agricultural development on the windward side of O'ahu was likely to have begun early (AD 1100–1300) during what is known as the Expansion Period (Kirch 1985).

It must be noted that Handy (1940:105) stated that, "... the bounds of cultivation...were strictly drawn by limitation of water for irrigation." The word "kula" meant "open country or plain", according to Handy and Handy (1972:510), and was often used to differentiate between dry, or kula land, and wet-taro land. The height and size of Haleakalā to the east, prevents moisture from reaching its southern and western flanks, causing and desert-like conditions throughout the region. "This is an essential characteristic of Kula, the central plain of Maui which is practically devoid of streams. Kula was always an arid region, throughout its long, low seashore, vast stony kula lands, and broad uplands" [Handy and Handy 1972:510]. As to the occupation of this vast plain, Handy and Handy stated:

> This is an essential characteristic of Kula, the central plain of Maui which is practically devoid of streams. Kula was always an arid region, throughout its long, low seashore, vast stony *kula* lands, and broad uplands.

As to the occupation of this vast plain, Handy and Handy (1972:511) stated:

> Both on the coast, where fishing was good, and on the lower westward slopes of Haleakala a considerable population existed. So far as we could learn Kula supported no Hawaiian taro, and the fishermen in this section must have depended for vegetable food mainly on *poi* brought from the wet lands of Waikapu and Wailuku to westward across the plain to supplement their usual sweet-potato diet.

An early witness to its lack of productivity was George Vancouver. During his second visit to Hawai'i in 1793 as a Captain, Vancouver anchored in Mā'alaea Bay, which he describes as follows (Vancouver 1984:852):

> The appearance of this side of Mowee was scarcely less forbidding than that of its southern parts, which we had passed the preceding day. The shores, however, were not so steep and rocky, and were mostly composed of a sandy beach; the land did not rise so very abruptly from the sea towards the mountains, not was its surface so much

> broken with hills and deep chasms; yet the soil had little appearance of fertility, and no cultivation was to be seen. A few habitations were promiscuously scattered near the water side, and the inhabitants who came off to us, like those seen the day before, had little to dispose of.

Not much had changed 24 years later (1817) when Peter Corney sailed this way, bound for O'ahu. He made special reference to Keālia Pond (now the Keālia Pond and Wildlife Refuge), a short distance southwest of the project area:

> . . . Next morning we passed Morokenee (Molokini), and made sail up Mackerey (Maalaea) bay. . . This bay is very deep and wide, and nearly divides the island, there being but a narrow neck of land and very low, keeping the two parts of the island together. . . On this neck of land are their principal salt-pans, where they make most excellent salt [Corney 1965:70-71].

To the northwest of the current project area lies ʻĪao Valley, one of the most important locations in the area for prehistoric activity. Connolly (1974:5) states that the pre-Contact valley [ʻĪao] had a large population base with "most people residing in a settlement near ʻĪao Needle," just north of the project area. Supposedly, the subsistence base of this population consisted of fish and taro, with Kahului Harbor and the coast close by and *loʻi* systems lining ʻĪao Valley's stream banks. Prehistoric ditches or *ʻauwai* were utilized in taro cultivation (Connolly 1974:5). Sterling (1998:86) adds that two *ʻauwai* within the valley:

> ...have existed immemorially and were evidently constructed for the purpose of irrigating kalo on the plains which stretch away to the northward and southward of the [ʻĪao] river. Several minor ʻauwai have, since ancient times, tapped the river at different points lower down and spread the water through the lands in the gulch on either side of the river bed.

Handy in Sterling (1998:63) further notes that "... [f]rom Waihee and Wailuku Valley, in ancient times, was the largest continuous area of wet taro cultivation in the islands." Cheever (1851:124) writes, "[t]he whole valley of Wailuku, cultivated terrace after terrace, gleaming with running waters and standing pools, is a spectacle of uncommon beauty to one that has a position a little above it."

Recent archaeological research (Fredericksen and Fredericksen 1996:52) has revealed that habitation sites along what is now Lower Main Street in Wailuku "are associated with the rich taro producing lands in the Lower ʻĪao River flood plain, and the extensive cultivation systems present in ʻĪao Valley." These habitation sites have been dated to the A.D. 15th through 17th centuries. The ʻĪao Valley area was not only renowned for its agricultural base during

prehistoric times but its ceremonial and political base as well (see also Cordy 1996; Donham 1996).

No discussion of Wailuku District is complete without mentioning the important *heiau* complex above ʻĪao Valley near its seaward terminus. During the mid to late 18th century, the Halekii-Pihana *heiau* complex was supposedly designed by a Hawaiian named Kiha (Sterling 1998:89). These monuments, designated as State Site 50-50-04-522 and occurring along the northwest flank of the current project area, are described as very important *heiau* within Hawaiian history. Yent (1983:7) notes the life cycle of the *aliʻi* was represented here. It was the place where Kamehameha I's wife (Keōpuolani) was born, Kahekili lived, and Kekaulike died. Thrum (1909:46) reported that Kamehameha I evoked his war god at Pihana Heiau after his warriors defeated Kalanikupuli's forces during the Battle of ʻĪao in 1790. The two *heiau* are primarily associated with Kahekili, who is connected with the Halekii-Pihana complex between c. A.D. 1765 and 1790, and Kamehameha, during his conquering of Maui in 1792 (Yent 1983:18). As stated, the area within and adjacent to the current project is known not only for its religious and/or ceremonial significance, but for its political prominence as well.

PRE-CONTACT PERIOD (PRE-1778)

Contact with the western world occurred on January 18, 1778, with the arrival of Captain James Cook in the Hawaiian Islands during his third voyage into the Pacific Ocean (Daws 1968:1). This section discusses traditional life prior to Cook's arrival.

According to Kamakau (cited in 1870 in Sterling 1998: 2), "...the ancient name of the island of Maui was Ihikapalaumaewa..." The island was renamed "...after a famous child of Wakea and Papa who became ancestor of the people of Maui" (cited in 1870 in Sterling 1998: 2). By the end of the 18th century, Fredericksen and Fredericksen (1992:52) state that politically, Wailuku [village] was known as a central settlement for high-ranking chiefs and their retinue. Kahekili, chief of Maui, resided with his entourage in Wailuku.

In 1837, the village of Kahului consisted of twenty-six *pili*-grass houses living close to the sea and depending on fishing in the coastal waters for the majority of their food (Bartholomew and Bailey 1994). Kahului is also famous for the twin fishponds Kanahā and Mauoni where mullet was still harvested in the early 1900s (Bartholomew and Bailey 1994). According to Mrs. Rosalie Blaisdell (in Stokes cited in Sterling 1998:87-88):

> The construction of the ponds was initiated by Kapiiohookalani, the ruling *aliʻi* of the islands of Oʻahu and half of Molokaʻi, using men from Oʻahu, Maui, and Molokaʻi to

construct the ponds. According to legend, the line of workers extended from Makawela to Kanahā with the men standing so close together they were able to pass the boulders used in the construction of the fishpond walls from hand to hand. Before the construction of the ponds had been completed, Kapiiohookalani was killed at the battle of Kawela, Moloka'i by Alapainui, of Hawai'i Island. Kamehamehanui, the ruling *ali'i* of Maui oversaw the completion of construction of the fishponds. Once the ponds were built, Kamehamehanui placed a *kapu* (taboo) on the *kuapa* (wall) separating the two ponds.

Kapiiohookalani was survived by two children; a young son named Kanahā okalani and a daughter named Kahamaluihiikeaoihilani. According to legend, Kahamaluihiikeaoihilani was of such high status, she was able to break Kamehamehanui's *kapu* and name the seaward pond Kanahā, in honor of her brother, and the other pond Mauoni, the name she used when traveling incognito.

Of interesting note is that according to Pukui *et al*. (1974:83), the *ali'i nui* Kiha-a- Pi'ilani is said to be credited with the construction of Kanahā Fishpond during the 1500s.

WAILUKU AND WAIKAPŪ AHUPUA'A

Wailuku and Waikapū Ahupua'a are located in the land division (*'okana)* which was once known as "Nā Wai Ehā" (The Four Streams). This area is ...comprised the four great valleys [Waihe'e, Waiehu, Wailuku, and Waikapū] which cut far back into the slopes of West Maui and drain the eastward watershed of Pu'u Kukui and the ridges radiating northeastward, eastward, and southeastward from it" (Handy and Handy 1972:497). This area once was renowned for "...its majesty and splendid living, whose native songs gather flowers in the dew and weave wreaths of ohelo berries" (S.W. Nailiili in Sterling 1998:93).

W. D. Alexander (in Sterling 1998: 63) also states that "...the lands of Waikapu and Wailuku appropriated almost the whole of the isthmus so as to cut off half of the lands in the

District of Kula from access to the sea. These two *ahupua'a*, together with Waiehu and Waihe'e, which were independent, belonging to no Moku, were called Na Poko, and have been formed into a district in modern times."

"Much of the upper section of what is now the city of Wailuku is built on old terrace sites" (Handy and Handy 1972:407) and Waikapū once was the setting of vast wet-land taro fields. Evidence of the widespread *lo'i* planting is provided by the Land Commission Awards, which indicate there once were more than 1,300 wet-land taro patches extending along the boundaries of Waikapū Stream (Creed 1993). Handy and Handy (1972: 497) describe the general Waikapū area as follows:

> Spreading north and south from the base of Waikapu to a considerable distance below the below the valley are the vestiges of extensive wet-taro plantings, now almost obliterated by sugar-cane cultivation; a few here and there are preserved in plantation camps and under house and garden sites along the roads. Among these gardens there were, in 1934, a few patches of Japanese taro. Far on the north side, just above the main road and at least half a mile below the entrance to the canyon, an extensive truck garden on old terrace ground showed the large area and the distance below and away from the valley that was anciently developed in terraced taro culture. On the south side there are likewise several sizable kuleana where in 1934 old terraces were used for truck gardening. In the largest of these a few old patches were flooded and planted with Hawaiian wet taro. Several terraces were used as ponds planted with lotus for their edible seed. There were probably once a few small terraces on the narrow of valley bottom in the lower canyon.

WAHI PANA (LEGENDARY PLACES)

"Wahi Pana" can be defined as celebrated or noted places or locations (Pukui and Elbert 1986:313, 376), and refers to legendary places or landmarks of historical significance. These places of note have distinctive features (*i.e.*, mountain peaks, streams, wind, rain, etc.) that are given specific names through which the history of an area is passed down from generation to generation through chants, legends, and songs.

WAILUKU AHUPUA'A

A famous chant from the Rebecca Nuuhiwa Audio collection (in Sterling 1998:62), called The Four Winds, is associated with Wailuku:

> Wailuku's wind is the Makani-lawe-mailie, the wind that takes it easy.
>
> Waiehu's wind is the Makani-hoo'eha-ili, the wind that hurts the skin.
>
> Waikapu's wind is the Makani-ko-kololio, the gusty wind.
>
> Waihee's wind is the Makani-kili-'o'pu.

According to Fornander (in Sterling 1998"63), "Wailuku is the source of the flying clouds. It is the broad plain where councils are held". "Wailuku" translated literally means "water of destruction" (Pukui *et al*. 1974:225) and the Wailuku area was witness to many battles, from the Battles of ʻĪao and Sand Hills to the Battles of Kepaniwai and Kakanilua. The most famous battle was that of Kepaniwai where Kamehameha I, in July 1790, finally wrested control of Maui Island. Kamehameha I and his warriors landed at the Kawela portion of Kahului Bay and proceeded up ʻĪao and other valleys to score a decisive victory. Of additional note is that in the Kauahea area of ʻĪao Valley (southeast of ʻĪao Stream below Pihana Heiau), warriors apparently

dwelt and were "trained in war skills and there was a boxing site in the time of Kahekili" (Sterling 1998:89).

In his bid to conquer Kahekili and obtain Maui (A.D.1776), Kalani'opu'u brought his famous, and fearless, 'Ālapa warriors who were slaughtered by Kahekili's men. "The dead lay in heaps strewn like *kukui* branches; corpses lay heaped in death; they were slain like fish enclosed in a net..." (Kamakau 1991:85-89).

An interesting anecdote is recounted by George W. Bates (1854:309), during his journey from Wailuku to Kahului in 1854:

> Leaving Wai-lu-ku [town], and passing along toward the village Kahului, a distance of three miles, the traveler passes over the old battle-ground named after the village. It is distinctly marked by moving sand-hills, which owe their formation to the action of the northeast trades. Here these winds blow almost with the violence of a sirocco, and clouds of sand are carried across the northern side of the isthmus to a height of several hundred feet. These sand-hills constitute a huge "Golgotha" for thousands of warriors who fell in ancient battles. In places laid bare by the action of the winds, there were human skeletons projecting, as if in the act of struggling for resurrection from their lurid sepulchers. In many portions of the plain who cart-loads were exposed in this way. Judging of the numbers of the dead, the contest of the old Hawaiians must have been exceedingly bloody. . . .

G.W. Bates' (1854) interpretation of a major battleground site in Kahului may not have been accurate, although there are many oral traditions about battles in this general area.

The 1776 encounter between Kahekili and Kalani'ōpu'ū resulted in a temporary truce which was broken in 1790 by the battle of Kepaniwai, when Kamehameha I consolidated his control over Maui Island. There were so many warriors and canoes invading from Hawai'i Island that it was called the Great Fleet. During Kamehameha's campaign, it was recorded ((Kamakau 1991: 148) that the bay from Kahului to Hopukoa was filled with war canoes and they extended to Kalae'ili'ili at Waihe'e and below Pu'uhele and Kamakailima:

> . . . Kamehameha and his chiefs went on to the principal encounter at Wailuku. The bay from Kahului to Hopukoa was filled with war canoes. For two days there was constant fighting in which many of the most skillful warriors of Maui took part, but Kamehameha brought up the cannon, Lopaka, with men to haul it and the white men, John Young and Isaac Davis, to handle it; and there was great slaughter.

From Kahului, Kamehameha marched on to Wailuku Village where Kalanikupule, Kahekili's son, waited with his warriors.

WAIKAPŪ AHUPUA'A

According to several accounts (Handy and Handy 1972:497, Sterling 1998:93-94, and Pukui *et al.* 1976:223, the name "Waikapū" (Water of the Conch) refers to an ancient cave in the area where a famous conch shell (*pū*) was hidden until it was stolen by Puapua-lenalena (a supernatural dog). Sterling (1998:93) offers two alternative origins of the name "Waikapū." In one account, the area known as "Nā Wai Ehā" was renowned for the battles fought there; the name Waikapū (the water where the conch was blown) referred to a conch shell that was blown to announce the commencement of a battle (C. W. Stoddard 1894 in Sterling 1998). In another account (H. T Cheever 1851 in Sterling 1998:63), "Waikapū" (Forbidden Water) refers to the time Kamehameha I, the Conqueror, beached his canoes at Kalepolepo and placed a *kapu* (taboo, restriction) on the nearest stream (Stoddard in Sterling 1998:63). Although Waikapū Stream is not the closest stream to Kalepolepo, it does drain into Keālia Pond, and it may have been the closest stream with flowing water at the time of Kamehameha's landing (Sterling 1998:63).

On a cliff above the stream and opposite the cave was a dog named Puapualenalena who had also heard the conch and was searching for it. However, those that guarded the conch were very attentive and so far; the dog had not located it:

> The owners of the conch did not believe, perhaps, that any supernatural being would succeed in taking it away, so they tried to be a little careless. It was not taken, but on the day that Pualenalena did get it away, they had been utterly careless. After he took it, it sounded no more to this day. It used to be heard everywhere in these islands and was annoying to some people. From this conch, the whole of the place was named Waikapū (Water of the conch). This is the legend of how it received its name and is a place much visited by strangers who wish to see it [W. K. Kaualililehua, *Ka Nupepa Kuokoa,* Sept 21, 1872].

Oral traditions preserved by Fornander (1969) and Kamakau (1963) contribute to our knowledge of Waikapū. The battle of Ahulau ka piipii i Kakanilua featuring the elite 'Ālapa warriors of Kalaniopu'u was fought in 1776 on the sand hills southeast of Wailuku:

> ...Taking part of his forces around by water, *Kalaniopuu* landed again at Kiheipukoa, near the Kealia or salt marsh between Kalepolepo and Mā'alaea...The detachment or regiment known as the *Alapa*, mustering eight hundred men, was selected for this hazardous expedition, and with high courage they started across the isthmus of Kamaomao, now known as the Waikapu common, determined, as the legend says, "to drink the waters of the Wailuku that day." This regiment was considered the bravest and best of *Kalaniopuu's* army, every man in its ranks being a member of "*la haute noblesse*" of Hawaii. They are said to have all been of equal stature and their spears of

> equal length; and the legend represents their appearance-with their feather cloaks-reflecting the sunshine and the plumes of their helmets tossing in the wind-as a gorgeous and magnificent spectacle...Offering no resistance to the enemy while crossing the common, *Kahekili* distributed his forces in various directions on the Wailuku side of the common, and fell upon the Hawaii *corps d'arnée* as it was entering among the sandhills south-east of Kalua, near Wailuku. After one of the most sanguinary battles recorded in Hawaiian legends and deeds of valor ...the gallant and devoted Alapa were literally annihilated; only two out of the eight hundred escaped alive to tell Kalaniopuu of this Hawaiian Balaclava... [Fornander 1969:153].

In a similar version, Kamakau (1963:65–86) recounts:

> ...The Alapa were led by Inaina, Kua'ana, Kane-ha'i-lua, and Keawe-hano. There were 800 of them, all expert spear-point breakers, every one of whose spears went straight to the mark, like arrows shot from a bow, to drink the blood of a victim. Across the plains of Pu'u'ainako and Kama'oma'o shone the feather cloaks of the soldiers, woven in the ancient pattern and colored like the hues of the rainbow in red, yellow, and green, with helmets on their heads whose arcs shone like a night in summer when the crescent lies within the moon...Said Ka-leo-pu'upu'u to Kahekili, "the fish have entered the sluice; draw in the net." Like a dark cloud hovering over the Alapa, rose the destroying host of Ka-hekili seaward of the sandhills of Kahalu'u, the "smoke head" (*po'ouahi*) and the "red coconut" (*niu'ula*) divisions. They slew the Alapa on the sandhills at the southeast of Kalua. There the dead lay in heaps strewn like *kukui* branches; the corpses lay heaped in death; they were slain like fish enclosed in a net. This great slaughter was called *Ahulau ka Pi'ipi'i Kakanilua.*

Although it has been said that Waikapū Valley contained "many temples and sites", most of their locations were not recorded (Ashdown 1970:58). Thrum (1917) refers to a *heiau* that was reportedly located on Pu'u Hele, but he did not confirm this. Thrum (1917) also mentions two *heiau* located below the road but again, they were not investigated, and their name and function had been lost (1916). One *mo'lelo* recounting the origin of its name was published in *Ka Nupepa Kuokoa* in 1872:

> The Wai-Ka-pū now being discussed was named by some of the ancients and it remains by this name to this day. This place, Waikapu, has a cave away up the stream, about a mile or more from the village. On the left side of the stream is a cave and in the cave was the conch. It sounded all the time, unseen by the public, but a prophet of Kauai listened for it and came to seek with the idea of finding it...

According to Manu Moses (in Sterling 1998:94), there is a legend associated with the *ali'i* Kihapi'ilani that refers to an "adze rock" which marked the boundary between Wailuku and Waikapū Ahupua'a:

> As Kihapiilani and his wife traveled on, they saw many people filling the road. At the stream of Wailuku (Waikapu?) the people were innumerable. Said the wife to the chief, "What are the people doing who are congesting the road? Kihapiilani said, "It would seem it has something to do with adzes.
>
> When they arrived at this place, they decided to go from the place where it was so crowded with people. There was a huge rock directly above the stream of Waikapu, mauka of the road which still passes at this time. This adze rock is the boundary between Wailuku and Waikapū Ahupuaa and it remains there to this day.

THE MĀHELE

Once Article IV of the Board of Commissioners to Quiet Land Titles was passed in December 1845, the legal process of private land ownership was begun. The land division, called the Māhele, began in 1848. As stated above, the lands of the kingdom of Hawai'i were divided among the king (crown lands), the *ali'i* and *konohiki*, and the government.

In the 1840s, traditional land tenure shifted drastically with the introduction of private land ownership based on western law. While it is a complex issue, many scholars believe that in order to protect Hawaiian sovereignty from foreign powers, Kauikeaouli (Kamehameha III) was forced to establish laws changing the traditional Hawaiian economy to that of a market economy (Kame'eleihiwa 1992:169-70, 176; Kelly 1983:45, 1998:4; Daws 1962:111; Kuykendall 1938 Vol. I:145). The Māhele of 1848 divided Hawaiian lands between the king, the chiefs, the government, and began the process of private ownership of lands. The subsequently awarded parcels were called Land Commission Awards (LCAs). Once lands were made available and private ownership was instituted, the *maka'āinana* (commoners) were able to claim the plots on which they had been cultivating and living. These claims did not include any previously cultivated but presently fallow land, *'okipū* (on O'ahu), stream fisheries, or many other resources necessary for traditional survival (Kelly 1983; Kame'eleihiwa 1992:295; Kirch and Sahlins 1992). If occupation could be established through the testimony of two witnesses, the petitioners were awarded the claimed LCA and issued a Royal Patent after which they could take possession of the property (Chinen 1961:16). If occupation could be established through the testimony of witnesses, the petitioners were issued a Royal Patent number and could then take possession of the property.

During the Māhele, Wailuku District was declared Crown Land and numerous Land Commission Awards, approximately 180, were awarded within Wailuku Ahupua'a while approximately 100 were awarded for Waikapū Ahupua'a (Creed 1993). A handful of foreigners (*i.e.,* Anthony Catalena, James Louzada, and E. Bailey) gained control of large parcels of lands

that would later be used for mass cultivation of sugar. Significantly, the majority of LCAs were awarded to Hawaiians, a gauge that can be used to measure pre-Contact settlement (Creed 1993:38). In Waikapū, the LCAs reflect *lo'i* cultivation, *kula* lands, and house sites. These keep with the overall LCA pattern of the Waikapū-Wailuku area intimating taro cultivation in association with permanent residences. Such a pattern is historically documented from 1848, but likely extended deeper into the past.

According to R.D. King (in J.W. Coulter cited in Sterling 1998:3) "[t]he large ahupuaas of Wailuku and Waikapu...belonged to no district, and at the time of the Mahele were said to be Na Poko, Na Poko in this case meaning a smaller division of the island." As Waikapū Ahupua'a belonged to the government, it was overseen by the Department of Education (Sterling 19978:95). According to Sterling (1998:95):

> In 1875 the Board of Education sold at auction the "Land known as the Ahupuaa of Waikapu, saving grants hitherto made within said ahupuaa, or sales by the Board of Education," to Henry Cornwell, the Government issuing a royal patent to the above terms without survey or statement of area. Mr. Cornwall afterward sold to Claus Spreckels and others the part known as Waikapu Commons.

LAND COMMISSION AWARDS (LCAs)

A search of the Waihona 'Aina Database (2017) indicated 278 LCAs were claimed in Wailuku Ahupua'a. However, none of these LCAs are located within the proposed project area.

The Waihona 'Aina Database (2017) listed 138 claimed LCAs in Waikapū Ahupua'a. The Office of Hawaiian Affairs Kipuka Database (2017) described LCA 71 (Royal Patent 4549) as consisting of 303.5 acres, which included the land now comprising the proposed project area. According to both the Waihona 'Aina Database (2017) and the Office of Hawaiian Affairs Kipuka Database, LCA 71 (Royal Patent 4549) was awarded to M.I. Nowlein (Nowlien) who was also known as Michael J. Nowlein, in 1863.

LAND GRANTS

A search of the Waihona 'Aina Database (2017) indicated two land grants were purchased in Wailuku Ahupua'a. The Office of Hawaiian Affairs Kipuka Database (2017) indicates one of these, Land Grant 3343, was located within the current area of interest. In 1882, Claus Spreckels purchased 24,000 acres of land for the commercial cultivation of sugar cane (Waihona 'Aina Database 2017). Land Grant records, including Land Grant 3343) are presented in Appendix C. By contrast, eighty-one land grants were purchased in Waikapū

Ahupua'a. Please note that the referenced databases refer to the lands of LCA 71 (Royal Patent 4549) and Land Grant 3343 as being located in both Wailuku and Waikapū Ahupua'a.

HISTORIC PERIOD (POST-1778)

As the sugar industry developed in the mid-1800s, more and more land was leased or purchased for what had become an intensely profitable endeavor. Water was an issue, but in 1876, the Hamakua Ditch Company (Alexander and Baldwin) was formed and within two years was bringing water from the streams of Haleakalā to four plantations in East Maui (Dorrance and Morgan 2000).

Also in 1876, the Reciprocity Treaty's ratification notice arrived by steamer, along with Claus Spreckles, California's sugar magnate, who viewed the sugar situation and decided two years later to turn the dry plains of Maui into a garden of cultivated cane (Van Dyke 2008). By various questionable means, he was able to acquire half interest in 16,000 acres of land in Waikapū commons and was able to lease 24,000 acres of Crown Lands on the Wailuku plains in central Maui for $1,000 (Van Dyke 2008).

Having seen the success of the recently completed Hamakua Ditch now bringing mountain water to the otherwise dry, and unproductive East Maui fields, and having lost his battle to control this ditch water, Spreckles formed the Hawaiian Commercial Company and decided to construct a ditch system of his own on East Maui above the Hamakua Ditch, for his newly acquired land (Wilcox 1996). Spreckles' Haiku Ditch extended 30 miles, from Honomanū Stream to the Kīhei boundary and the water was used to irrigate his cane lands in the central Maui plains (*ibid.*).

In 1882, Spreckles reorganized his company into a California corporation, called Hawaiian Commercial and Sugar Company, or HC&S (Wilcox 1996). Later he constructed another water system known as the Waihee Ditch in West Maui. It brought water from 15 miles away, starting at an elevation of 435 feet, to Kalua where it emptied into HC&S Waiale Reservoir (*ibid.*).

The ensuing years brought trials and tribulations between Spreckles, his associates, and the Maui sugar planters, resulting finally in the 1898 sale of his HC&S stock, at an all-time low, to James Castle in partnership with Alexander and Baldwin, and the departure of Claus Spreckles from Hawai'i (Dorrance and Morgan 2000; Wilcox 1996).

Thomas Hogan built the first western building, a warehouse, near the shoreline of Kahului in 1863 (Clark 1980). The dredging of Kahului harbor through the years filled in large sections of the ponds, eventually blocking the outlet to the sea.

As the sugar industry developed, Kahului became a cluster of warehouses, stores, wheelwright, and blacksmith shops close to the harbor. A small landing was constructed in 1879 to serve the sugar company (Clark 1980). In the late 1800s, Kahului possessed a new custom house, a saloon, Chinese restaurants, a railroad and a small population of residents. Kahului's main focus was shipping. The 1900 bubonic plague outbreak destroyed much of the town as officials decided to burn down the Chinatown area in an effort to contain the epidemic. The Chinese, Japanese and Hawaiian residents were displaced by this action. To further ensure isolation, authorities encircled the entire town with corrugated iron rat-proof fences, which ended the spread of the plague (Bartholomew and Bailey 1994). The Kahului Railroad Company built a 1,800-foot long rubble-mound breakwater in 1910 and dredging of the harbor now allowed ships with a 25-foot draft to dock at the new 200-foot wharf (Clark 1980).

Henry Baldwin and Lorrin Thurston formed the Kihei Sugar Company in 1899, to grow cane on their ranch lands in south central Maui, which included the project area (Dorrance and Morgan 2000). It was sent to the mill at Pu'unēnē to be ground, but, although production was high, it was not enough to cover the costs (Dorrance and Morgan 2000).

After the annexation in 1898, some of the planters on Maui, including Alexander and Baldwin, had decided to combine plantations to reap maximum profit. They formed the Maui Agricultural Company, a co-partnership that initially encompassed seven plantations and two mills. In 1904, five new plantations became part of the Maui Agricultural Company, as Kula Plantation Company, Makawao Plantation Company, Pulehu Plantation Company, Kailua Plantation and Kalianui Plantation Company were newly formed by carving up the unprofitable Kihei Plantation land (Dorrance and Morgan 2000). Maui Agricultural Company merged with HC&S in 1948 (Dorrance and Morgan 2000).

Land use in Wailuku and Waikapū Ahupua'a in the mid-19th and early 20th century was largely devoted to the sugar industry. During the 1860s, the sugar business was growing, with plantations and mills at Wailuku, Waihe'e, Waikapū, and Ha'ikū. Many of the plantation camps associated with these mills were centered in the Pu'unēnē, Kahului, and Wailuku area (see Denham *et al.* 1992:16). Hopoi Camp is said to have been located near Hopoi Reservoir. Hopoi Reservoir was constructed by at least by 1922, when references to Hopoi Camp occurred on an

area map. Historic utilization of the Waikapū-Wailuku landscape near the project area focused on industrial-levels of cultivating sugar cane and pineapple. Water was channeled from traditional sources (*e.g.*, Waikapū Stream, western aquifers or springs) through plantation lands. Both local and imported workers operated on these plantation lands and the area maintained fair population density. These former sugar cane and pineapple lands are now being reclaimed through residential developments and industrial baseyards.

PREVIOUS ARCHAEOLOGY

Archaeological studies in the greater area began in the early 20th Century by T. Thrum (1909), J. Stokes (1909–1916), and W. M. Walker (1931), under the auspice of the Bernice Pauahi Bishop Museum. These studies are briefly discussed below, and the project locations are presented in Figure 5.

Thrum (1909-1918:59) mentions that two *heiau* may have possibly existed within the *ahupua'a* of Waikapū, but evidence of the two sites no longer remains. A group of approximately 45 house and shelter sites (State Sites 50-50-09-1441, the McGregor Point C-shaped structures, and State Site 50-50-09-1287, the Mā'alaea Complex) was identified by Walker (1931) to the west of Mā'alaea. Chronology for these sites has yet to be determined (Creed 1993). Walker (1931:58) also described a *koa*, or fishing shrine, and two petroglyph fields with an associated *heiau* (State Sites 50-50-09-1169 and -1199) at Mā'alaea. The *koa* was not assigned a State Site number, nor has it been relocated.

The Bishop Museum (Rotunno-Hazuka *et al.* 1995) conducted excavations at the Maui Lani Development Property identified State Site 50-50-04-2797, multiple traditional pre-Contact native Hawaiian burials.

Pantaleo and Sinoto (1996) conducted archaeological subsurface sampling at the Maui Lani Development. Findings included one concentration of multiple burials and isolated individual burials located at the tip of the dune (in the highest elevational locations). A more contemporary report documenting additional burial finds at Maui Lani should aid in clarifying the overall results of that project and bolster the number of burials and significant finds during the project.

Scientific Consultant Services, Inc. (Dega 2003) conducted an Archaeological Inventory Survey of 100 acres located Wailuku Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2)

3-5-001: portion of 001], located adjacent and northwest of the proposed project area. Three historic sites were documented during this Inventory Survey: State Site 50-50-04-5473 Hopoi Reservoir; State Site 50-50-04-5474, Kama Ditch; and State Site 50-50-04-5478, an isolated basalt adze. Subsurface testing yielded negative findings.

Scientific Consultant Services, Inc. (Monahan 2003) conducted an Archaeological Inventory Survey on two undeveloped lots totaling approximately 30 acres in Wailuku Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2) 3-5-o01: o61, 063, and 066; formerly 017]. No historic properties were identified during the survey.

Archaeological Surveys Hawaii LLC (Guerriero et al. 2004) conducted an Archaeological Inventory Survey of a 50-acre parcel of land in Wailuku and Waikapū ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2) 3-5-002: por. 001], located immediately adjacent and south of the proposed project area. During the survey, the Kama Ditch (State Site 50-50-04-5474) was documented. The Kama Ditch, constructed around 1905 to 190, provided water to the sugarcane and subsequent pineapple fields.

In 2004 (Dega 2004) conducted an Archaeological Inventory Survey of Scientific Consultant Services, Inc. (Dega 2003) conducted an Archaeological Inventory Survey of 100 acres located Wailuku Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2) 3-5-001: portion of 001], located at the west and northwest of the proposed project area. Three historic sites were documented during this Inventory Survey: the Hopoi Reservoir (State Site 50-50-04-54730; the Kama Ditch (State Site 50-50-04-5474); and an isolated basalt adze (State Site 50-50-04-5478). Subsurface testing yielded negative findings.

Scientific Consultant Services, Inc. (Wilson and Dega 2005) conducted an Archaeological Inventory Survey of t 215.800 acres, Waikapū (and partially Wailuku) Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2) 3-5-02: 02 and 03], located adjacent and southwest of the proposed project area. Seven historic sites were documented during this Inventory Survey: State Site 50-50-04-5197, Waihee Ditch; State Site 50-50-04-5493, Waikapu Ditch; State Site 50-50-04-5729, a lesser, un-named, rock and mortar ditch; State Site 50-50-04-5726, a lesser, un-named, earthen ditch/drainage; State Site 50-50-04-5727, a large, un-named reservoir—the terminus of Waikapu Ditch; State Site 50-50-04-5728, a sugar field erosion-control site comprised of 14 cross-slope, earthen berms of varying length that are positioned regularly throughout the project area; and State Site 50-50-04-5730, "Old Waikapu Road", a cane-haul transport, dirt road.

Scientific Consultant Services, Inc. (Tome and Dega 2010) conducted Archaeological Inventory Survey of approximately 607-acres of land in Wai'ale, Wailuku, and Waikapū Ahupua'a, Wailuku District Maui [TMK: (2) 3-8-005:23 (por.), 37 and (2) 3-8-007: 71, 101, 102, 104], located southeast of the proposed project area. During the survey, previously identified sites were relocated: State Site 50-50-04-3525, burials; State Site 50-50-04-4200, State Site 50-50-04-4201, a terrace; and State Site 50-50-04-4202, several Historic Period sites. State Site 50-50-04-6578, a subsurface firepit/imu was newly identified. Mechanical test excavations yielded negative findings.

Scientific Consultant Services, Inc. (Perzinski and Dega 2012) conducted Archaeological Inventory Survey of 2.0 acres of arid land in Waikapū, Waikapū Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK:(2): 3-5-002:015]. Four Historic Period archaeological sites were documented during the Inventory Survey. State Site 50-50-04-6808 represents Waikapu Cemetery. The community cemetery, which is not a municipal cemetery, contains approximately 75 marked burials and 20 unmarked burials, and was used for interment from 1900 through 1961. State Site r 50-50-04-6809 is a Historic Period cistern associated with a piggery. State Site 50-50-04-6810 represents an Historic Period overflow ditch, long since abandoned. State Site 50-50-04-6811 represents at least two traditional Native Hawaiian burials that have been identified through consultation as occurring *makai* or east of the historic cemetery. One Hawaiian burial is demarcated by a headstone and represents the resting place of Ernest Malai. A second burial, that of Papia Nawa'a, is unmarked and was designated by lineal descendants. Representative subsurface testing yielded negative results.

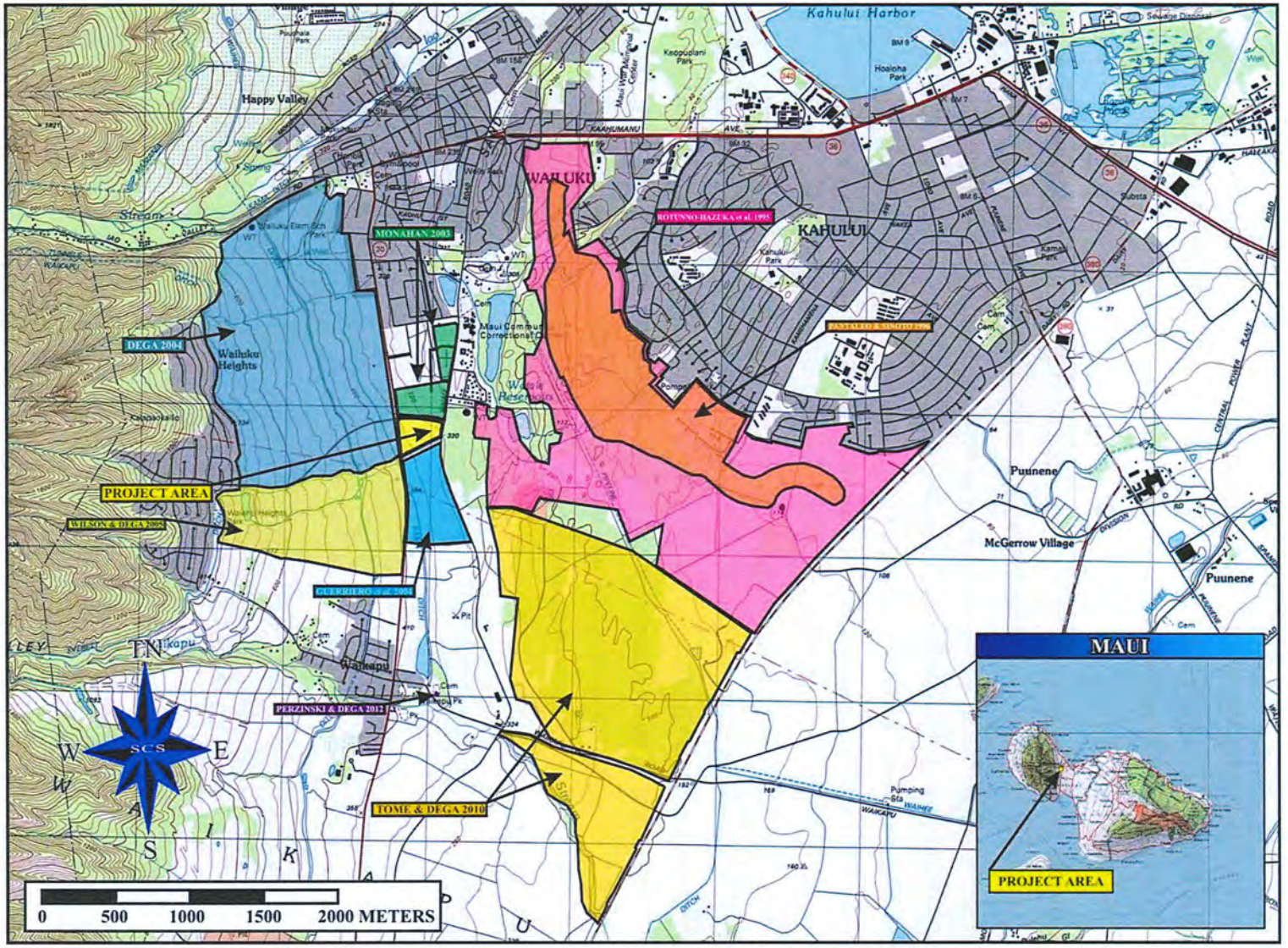


Figure 5: USGS (Wailuku, HI 1997; 1:24,000) Quadrangle Map Showing Previous Archaeological Studies in the Vicinity of the Proposed Project Area.

CONSULTATION

Consultation was conducted via telephone, e-mail, and the U.S. Postal Service. The initial letters of inquiry (see Appendix A) and associated project area map were mailed between September 2017 and March 2018. The subsequent follow-up letters (see Appendix B) were mailed between September and November 7, 2017. During the consultation process, SCS sought consultation from the following twenty-one individuals and organizations:

1. Leslie Kuloloio, Community member and former member of the Maui/Lāna'i Islands Burial Council;
2. Chris Nakahashi, Cultural Historian, State Historic Preservation Division;
3. Andrew K. Phillip, Burial Sites Specialist State Historic Preservation Division;
4. Clifford Nae'ole, community member and Hawaiian Cultural Advisor;
5. Hokuao Pellegrino, cultural practitioner;
6. Rose Duey, cultural practitioner and community member;
7. Hokulani Holt-Padilla, cultural practitioner;
8. Joyclynn Costa, cultural practitioner; Kī'ope Raymond, cultural practitioner;
9. Dr. Kamana'opono M. Crabbe, Office of Hawaiian Affairs;
10. Thelma Shimaoka, Office of Hawaiian Affairs;
11. Roy Newton, Office of Hawaiian Affairs; Roy Newton, Office of Hawaiian Affairs;
12. Maui Sierra Club;
13. Lucienne de Naie, President, Maui Tomorrow;
14. Ke'eaumoku Kapu, CEO, Aha Moku o Maui;
15. Johanna Kamaunu, Wailuku District Representative, Maui/Lana'i Islands Burial Council;
16. Kaniloa Kamaunu, Wailuku District Representative, Aha Moku O Maui;
17. Waikapu Community Association;

18. Glenn McLean, community member;

19. Wally Rogers, long-time community member, family has lived in Waikapū on Upper Waiko Road for several generations. His father was Eddie Rogers who started the Rogers Ranch and pig farm in Waikapū;

20. Clayton Suzuki, long-time community member and worked for Wailuku Sugar Company; and

21. Roger Yamaoka, long-time community member and family also comes from Waikapu

This process resulted in SCS conducting three interviews, via telephone, and receiving two written responses. The interview summaries are presented below:

INTERVIEWS

Clayton Suzuki, long-time community member and worked for Wailuku Sugar Company.

Clayton Suzuki was interviewed via telephone by Cathleen Dagher on February 27, 2018. Mr. Suzuki reviewed his interview summary between March 2 and March 4, 2018, when SCS received his edited summary, via e-mail.

Clayton Suzuki grew up on the island of Hawaii and came to Maui for work opportunities. After graduating from the University of Hawaii. He came to Maui in 1975 to work for HC&S then moved to Wailuku Sugar Company in 1978. He worked for the company as an engineer then later as the Operation Manager till retirement in 2016.

Wailuku Sugar Company shut down its sugarcane milling operation in 1979, it delivered the sugarcane to the HC&S mill under contract. The 2500 acres of sugarcane from Iao Valley to Waihee Valley were converted to Macadamia Nut in the early 1980's. Sugarcane was continued in the 2500 acres in the Wailuku to Maalaea area. Some Wailuku fields about 500 acres were left fallow, its long term plan was for a housing development,

Wailuku Sugar Company became Wailuku Agribusiness in 1988 when its sugarcane growing operation stopped. Much of the lands in sugar were converted to pineapple and sold to Maui Land & Pineapple. The fields that were of sandy soil were not

converted to pineapple. These fields were left fallow. The macadamia nut operation continued.

After closing both its macadamia nut and pineapple operations in 1999, Wailuku Agribusiness became Wailuku Water Company. This company continued its water delivery operations using the existing ditch system used for its agricultural operations.

Mr. Suzuki did not mention any traditional cultural activities practiced in the area.
Concerns: None

Roger Yamaoka, long-time community member and family also comes from Waikapu.

Roger Yamaoka was interviewed via telephone by Cathleen Dagher on February 28, 2018. Mr. Yamaoka reviewed his interview summary between March 2 and March 8, 2018, when SCS received his edited summary, via e-mail.

Roger Yamaoka is a long-time Waikapū community member whose family comes from Waikapū. His father owned a pig farm near the Vida family's in Waikapū, several miles away on Old Waikapu Road, which is where Mr. Yamaoka grew up. Mr. Yamaoka said that the project area was currently used as a baseyard or staging area for a construction company, and that Long's Drugs and Foodland where nearby, and a prison is located to the north. He also mentioned that Emmanuel Lutheran Church of Maui was on the next lot over to the south.

He remembered that when he was a child, some 50 years ago, and while he was growing up, the whole area was planted in sugar cane and later in pineapple. After the sugar mill closed down, the area was abandoned, and eventually was covered in grass and weeds. Gradually the area came to be developed – first homes began to appear (Kealani Subdivision), then Foodland and Long's Drugs, and Maui Lani began to open up.

Mr. Yamaoka stated that he was not aware of any tradition cultural practices conducted in the area nor was he aware of anywhere in the area where traditional cultural practices could be conducted, as the whole area was under commercial agriculture for many years and eventually began to be developed for residential use.

Mr. Yamaoka suggested SCS contact the Vida family, as they may have information pertaining to traditional cultural practices conducted in the area. He also spoke highly of Uncle Les Kululoio and suggested be contacted, as he would be a reliable source of information on traditional cultural practices conducted in the area.
Concerns: None

Wally Rogers, long-time community member, family has lived in Waikapū on Upper Waiko Road for several generations. His father was Eddie Rogers who started the Rogers Ranch and pig farm in Waikapū.

Scientific Consultant Services, Inc. reached out to Mr. Rogers on February 27 and March 6, 2018, via telephone. Scientific Consultant Services, Inc. spoke with Dolores, Mr. Rogers' wife, on both occasions. Mrs. Rogers said that she and her husband reached out to other family members in an effort to see if they had information about traditional cultural practices conducted in the near the proposed project area. None of the family members had any information to share.

Concerns: None

WRITTEN RESPONSES

The written responses are presented below:

Chris Nakahashi, Cultural Historian State Historic Preservation Division. Scientific Consultant Services receive a written response, via e-mail dated September 11, 2017, from Chris Nakahashi, Cultural Historian State Historic Preservation Division:

> Aloha Cathy,
> Mahalo for contacting me regarding the CIA for the proposed Wailuku Affordable Housing Project.
> The people listed at the bottom of your September 9, 2017 letter are appropriate to contact regarding the traditional cultural practices in the ahupua'a of Wailuku and Waikapū, on the island of Maui.
> Please contact Ke'eaumoku Kapu... about this CIA.
> I recommend SCS to also utilize the media (e.x. OHA's Ka Wai Ola, Maui News, etc.) to solicit additional information for this CIA.
> I recommend SCS also to contact and meet with the native tenants and people that currently live or previously lived in the ahupua'a of Wailuku and Waikapū on Maui for information about the cultural customs and practices for this CIA.

Please let me know if I can assist with anything else.
A hui hou,

Christopher "Ikaika" Nakahashi, M.S.
Cultural Historian
Department of Land & Natural Resources
State Historic Preservation Division

Scientific Consultant Services, Inc. did include Mr. Kapu in the consultation process. The initial letter of inquiry and associated project area maps were sent to Mr. Kapu via an e-mail dated September 29, 2017. The follow-up letter was sent to Mr. Kapu via an e-mail dated October 17, 2017. However, SCS did not receive a response from Mr. Kapu.

Kaniloa Kamaunu, Wailuku District Representative, Aha Moku O Maui

Scientific Consultant Service, Inc. received an e-mail dated November 7, 2017, from Mr. Kamaunu. In his e-mail Mr. Kamaunu stated that the proposed project area is adjacent from Long's on Waiale Drive and expressed concerns about what companies would be conducting the Archaeological Inventory Survey and preparing the Environmental Impact Assessment.

Glenn McLean, community member, community member

Scientific Consultant Services, Inc. made several unsuccessful efforts to contact Mr. McLean:

In an e-mail dated October 26, 2017, SCS contacted Hinano R. Rodrigues, State Historic Preservation Division (SHPD) Culture and History Branch Chief requesting Mr. McLean's contact information. In an e-mail dated October 27, 2017, Mr. Rodrigues responded, "I don't have contact information for him, but I am sure his son Luke lives in Waikapu on a daily basis. Hokuao [Pellegrino] may be able to contact him."

As no contact information was provided for Luke McLean, SCS e-mailed Mr. Pellegrino, via an e-mail dated October 27, 2017, requesting this information. Scientific Consultant Services, Inc. did not receive a response from Mr. Pellegrino.

In an e-mail dated October 27, 2017, SCS reached out to Andrew "Kealana" Phillips, SHPD Burial Sites Specialist requesting Mr. McLean's contact information. Mr. Phillips did not respond.

In e-mails dated October 24 and 27, 2017, SCS reached out to Chris Nakahashi, SHPD Cultural Historian, also requesting Mr. McLean's contact information. Mr. Nakahashi responded, via an e-mail dated October 25, 2017, that he did not have the requested information.

CULTURAL IMPACT ASSESSMENT SUMMARY

This Cultural Impact Assessment was prepared in accordance with the Guidelines for Assessing Cultural Impacts (OEQC 1997:11-13). The Guidelines recommend that a CIA consult relevant individuals/organizations, conduct ethnographic interviews and archival and historical research, identify cultural resources and practices located within the project area or in proximity, and finally, assess the impact of the proposed action and its mitigation measures on the cultural practices or resources identified.

Letters of inquiry were sent to twenty-one individuals and organizations that may have knowledge or information pertaining to the collection of cultural resources and/or traditional cultural practices currently, or previously, conducted in the vicinity of the proposed project area. The consultation process resulted in SCS receiving two written responses. No traditional cultural practices or activities associated with access, subsistence, cultural, or religious purposes were identified during the consultation process.

IDENTIFED CULTURAL PRACTICES

The purpose of a CIA is to identify the possibility of on-going cultural activities and resources within a project area, or its vicinity, and then assessing the potential for impacts on these cultural resources. The project site was located in an area rich with traditional and customary practices during the pre-Contact and early historic eras. However, based on historical research and the above responses, it is reasonable to conclude that there is no evidence of cultural practices related to Hawaiian rights related to gathering, access or other customary activities currently occurring at the site or in the immediate vicinity.

IMPACT ASSESSMENT

The Cultural Impact Assessment has reviewed historical research and information received from community members. This information has been analyzed for the potential effect of the project on cultural resources, practices or beliefs, its potential to isolate cultural resources, practices or beliefs from their setting, and the potential of the project to introduce elements which may alter the setting in which cultural practices take place, as recommended by the OEQC Guidelines (1997).

Analysis of the potential effect of the project on cultural resources, practices or beliefs, its potential to isolate cultural resources, practices or beliefs from their setting, and the potential of the project to introduce elements which may alter the setting in which cultural practices take place is a requirement of the OEQC (No. 10, 1997). The findings of this study indicate the proposed project area has not been used for traditional cultural purposes within recent times.

The historical research and the above responses indicates it is reasonable to conclude, in accordance with the purposes outlined by Ka Pa'akai, addition, the current study did not identify any "valued cultural, historic, or natural resources" in the petition area. In addition, pursuant to Act 50, that Hawaiian rights related to gathering, access or other customary activities within the project area will not be affected and there will be no direct adverse effect upon cultural practices or beliefs by the proposed project.

CONCLUSION AND RECOMMENDATIONS

Based upon this review and analysis, sufficient information has been provided in this document to determine that while traditional cultural practices are likely to have previously been conducted within the project are, no traditional cultural practices are currently known to be conducted within the proposed project area. This determination has been substantiated by the culture-historical background, the summarized results of prior archaeological studies in the project area, and in the neighboring areas, and primarily in the concerns expressed by the cultural informants during the consultation process of the current CIA. In addition, the findings of the current study did not identify any "valued cultural and natural resources" within the proposed Waikapu Affordable Housing Project, located in Wailuku, Wailuku and Waikapū Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2) 3-5-001:064].

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APPENDIX A: EXAMPLE LETTER OF INQUIRY

SCIENTIFIC CONSULTANT SERVICES, Inc.
1347 Kapiolani Blvd. Suite 408 Honolulu, Hawai'i 96814

Aloha kāua,

In compliance with the State of Hawai'i Revised Statute (HRS) Chapter 343 Environmental Impact Statements Law, and in accordance with the State of Hawai'i Department of Health's Office of Environmental Quality Control (OEQC) Guidelines for Assessing Cultural Impacts as adopted by the Environmental Council, State of Hawai'i on November 19, 1997, Scientific Consultant Services, Inc. (SCS) is in the process of preparing a Cultural Impact Assessment (CIA) in advance of a proposed Wailuku Affordable Housing Project. The proposed project consists of a 324-unit apartment to be located in Wailuku, Wailuku and Waikapū Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2) 3-5-001:064] (Figures 1 through 3). The proposed project area consists of a total of approximately 14.416-acre property, which is owned by Kehalani Agricultural Investors LLC.

According to the *Guidelines for Assessing Cultural Impacts* (Office of Environmental Quality Control, Nov. 1997):

> The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs...The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man made and natural which support such cultural beliefs...

We are seeking any information that you or other individuals have which might contribute to the knowledge of traditional cultural activities that were, or are currently, conducted in the vicinity of the Wailuku Affordable Housing Project. We are also asking

for any information pertaining to traditional cultural activities or traditional rights, which may be impacted by the proposed project. The results of the cultural impact assessment are dependent on the response and contributions made by individuals and organizations.

Enclosed are maps showing the proposed project areas. Please contact me at the Scientific Consultant Services, Honolulu, office at (808) 597-1182 or via e-mail (cathy@scshawaii.com) with any information or recommendations concerning this Cultural Impact Assessment.

Sincerely yours,



Cathleen Dagher
Senior Archaeologist
Enclosures (3)

APPENDIX B: EXAMPLE FOLLOW UP LETTER

SCIENTIFIC CONSULTANT SERVICES, Inc.
1347 Kapiolani Blvd., Suite 408 Honolulu, Hawai'i 96814

Aloha kāua,

This is our follow-up letter to our September 9, 2017 letter which was in compliance with the statutory requirements of the State of Hawai'i Revised Statute (HRS) Chapter 343 Environmental Impact Statements Law, and in accordance with the State of Hawai'i Department of Health's Office of Environmental Quality Control (OEQC) Guidelines for Assessing Cultural Impacts as adopted by the Environmental Council, State of Hawai'i, on November 19, 1997.

Scientific Consultant Services, Inc. (SCS) is in the process of preparing a Cultural Impact Assessment (CIA) in advance of a proposed Wailuku Affordable Housing Project. The proposed project consists of a 324-unit apartment to be located in Wailuku, Wailuku and Waikapū Ahupua'a, Wailuku District, Maui Island, Hawai'i [TMK: (2) 3-5-001:064]. The proposed project area consists of a total of approximately 14.416-acre property, which is owned by Kehalani Agricultural Investors LLC.

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> The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs...The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man made and natural which support such cultural beliefs...

We are seeking any information that you or other individuals have which might contribute to the knowledge of traditional cultural activities that were, or are currently,

conducted in the vicinity of the Wailuku Affordable Housing Project. We are also asking for any information pertaining to traditional cultural activities or traditional rights, which may be impacted by the proposed project. The results of the cultural impact assessment are dependent on the response and contributions made by individuals and organizations.

Please contact me at the Scientific Consultant Services, Honolulu, office at (808) 597-1182 or via e-mail (cathy@scshawaii.com) with any information or recommendations concerning this Cultural Impact Assessment.

Sincerely yours,



Cathleen Dagher
Senior Archaeologist

Cc: Roy Newton, Office of Hawaiian Affairs; Lucienne de Naie, President, Maui Tomorrow; Leslie Kuloloio, Community member and former member of the Maui/Lāna'i Islands Burial Council; Chris Nakahashi, Cultural Historian State Historic Preservation Division; Andrew K. Phillip, Burial Sites Specialist State Historic Preservation Division; Clifford Nae'ole, community member and Hawaiian Cultural Advisor; Hokuao Pellegrino, cultural practitioner; Rose Duey, cultural practitioner and community member; Hokulani Holt-Padilla, cultural practitioner; Joyclynn Costa, cultural practitioner; Kī'ope Raymond, cultural practitioner; Dr. Kamana'opono M. Crabbe, Office of Hawaiian Affairs; Maui Sierra Club; Ke'eaumoku Kapu, CEO, Aha Moku o Maui

APPENDIX C: LAND COMMISSION AWARD 71 AND LAND GRANT 3343

Document Delivery

Mahele Database Documents

Number: 00071

Claim Number:	**00071**
Claimant:	**Nowlein, M.I. (Nowlien)**
Other claimant:	
Other name:	Nowlein, Michael J.
Island:	**Maui**
District:	**Wailuku**
Ahupuaa:	**Waikapu**
Ili:	**Papakapu, Kapoi**

Apana:	**2**	Awarded:	**1**
Loi:		FR:	75v1, 77v1
Plus:		NR:	
Mala Taro:		FT:	**139v1**
Kula:		NT:	**56v1**
House lot:		RP:	**4549**
Kihapai/Pakanu:		Number of Royal Patents:	**1**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**

Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**No**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**
Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	

No. 71, M.I. Nowlein, Claimant, Maui

F.R. 75, 77v1

To the Honorable Land Commissioners, June 8th 1846

I wish to put my claim before the commissioners for a tract of land held by me in the state of Waikapu.

In the month of April 1827 I gave to Kahumanu $18 eighteen dollars in cash, and She gave to me a tract of land called Koii, bounded on one side by Awikiwiki & the Lapahalii; on the other extending the parra on the mountain westward; and to the sand hills on the eastward.
Michael I. Nowlien

[See No. 325, F.R. 182v1, No. 325]

F.R. 139v1

Claim No. 71, Nowlien

See evidence of Kaweka

F.T. 139v1

Claim No. 71, I. Nowlien

See evidence of Kaweka [note: Register Page 75]

N.T. 56v1

No. 71, Kimo M. I. Nowlien [Nowlein], Lahaina, December 21, 1846

Kaweka's sworn testimony:

Kimo asked Kaahumanu for a piece of property at Waikapu. She consented to his request but because she did not want people to know that she had land, she directed me to give approval and to grant a piece of property, so I asked Napuupahoehoe, "You, give a piece of property for the haole, Kimo. Our chief has asked us to do this and I have consented." Kimo gave me the money which I took and found the chief at Kamakapelapela's place. I gave him, to Keahonui, a part of the money. Then he asked how much it had cost. Eight dollars was received from Kimo and he wanted to know who owned the document.

This document is not mine, I have not made any contacts or agreements because I have had problems in the past months.

Question: Was there any other people who had heard this?
Answer: Other foreign women only.

That was the end.

[Award 71; R.P. 4529B & R.P. 4549; Papakapu Waikapu; 1 ap.; 303.5 Acs; Kapoi Waikapu; 2 Acs]

Grant Number(LG)	03343	Source Book:	**15**
Grantee:	**Spreckles, Claus**	Acreage::	**24000** Acs
Ahupua'a	**Wailuku**	Year	**1882**
District:	**Wailuku**	Cancelled	**False**
Island	**Maui**	TMK	

Miscellaneous

No. 3343, Spreckles, Claus, Wailuku Ahupuaa, District of Wailuku, Island of Maui, Vol. 15, pps. 417-419 [LG Reel 5, 01055-01057]

No. 3343
ROYAL PATENT

(GRANT)

Kalakaua, By the Grace of God, King of the Hawaiian Islands, by this His Royal Patent, makes known unto all men, that he hath, for himself, his heirs and successors, this day granted and given unto Claus Spreckles, under and w[?] of the provisions of an Act of the Legislative Assembly of the of the Hawaiian Islands, approved on the 21st day of July 1882 entitled An Act to authorize the Commission of Crown Lands to [give up?] certain portions of such lands to Claus Spreckles in dis...[disputes?] of ~~for the consideration of~~ all claims he may have on such lands, ~~paid into the Royal Exchequer~~, all that piece of Land situate ~~at~~ in Wailuku, and known as the Ahupuaa of Wailuku with the Ilis therein or thereunto belonging and described as follows:

Beginning at a red wood post and pile of stones on the sea shore and adjoining the land of Hamakuapoko at the place called Kapukaahea from which post the Government survey station of Puunene bears South 8° 15' West true and running
South 9° 59' East true 1062 feet along Hamakuapoko to Keonekupoo
South 41° 7' East true 3013 feet along Hamakuapoko to pile of stones, at Nukukahawai
South 22° 3' East true 934 feet to a large rock called Olopua, which forms the corner of Wailuku, Haliimaile and Hamakuapoko. Thence
South 26° 40' East true (South 35 1/2° East magnetic)1304 feet along Haliimaile to Puupili, Thence
South 21° 17' East true (South 30 East magnetic) 1610 feet along the ravine to marked rock called Kaiokukukini[?] about 170 feet South of the road to Kahului, thence

South 17° 4' East true (South 25 3/4 East magnetic) 1592 feet to a pile of stones at Kauhiana on West side of ravine, thence
South[?] 32° 18' East true (South 40 3/4 East magnetic) 1390 feet to a marked rock by the by the path at Pulunali
South 35° 7' East true (South 42 1/4 East magnetic) 3508 feet to wiliwili tree on West bank of gulch which is the corner of Haliimaile and the district of Kula. Thence
South 36° 27' West true 5346 feet along Kula,
South 29° 21' West true 6159[?] feet along Kula,
South 28° 36' West true 982 feet along Kula to a concrete post marked with a cross at the Northwest corner of Kalialinui and Wailuku, from which the Government survey station on Puu o Koha bears South 38° 25' East true, thence
South 28° 36' West true 1376 feet along Kalihiwai to top of a large rock called Puukoae, Thence
South 36° 41' West true 3050.5 feet along Kalialinui to a granite post at the corner of Kalialinui, Wailuku and Pulehunui. From which the Government survey station on Puu Hele bears South 82° 6' West true, Thence
North 64° 5' West true 36030 feet along Pulehunui and Waikapu to Pohakoi a marked rock a short distance West of road to Waikapu, Thence
North 73° 45' West true (North 85° West magnetic) 53262 feet along Waikapu up ridge
North 82° 30' West true (South 86° 15' West magnetic) 11088 feet along Waikapu to stone post on the crest of the ridge known as Kalapaokailio, Thence along up centre of this ridge along Waikapu always following the water shed to the ridge forming the head of Olowalu Valley, Thence following said ridge dividing [Page 418] this from Olowalu Valley, Thence around by the ridge forming the head of Wailuku Valley, to the head of the land of Waihee, thence along the dividing ridge between the Wailuku and the Waihee Valleys to the head of Waiehu, Thence
South 70° 59' East true 3366 feet along Waiehu down ridge
North 80° 36' East true 2161.5 feet along same to junction of ridges called Kahoolima [liwa?]
North 63° 36' East true 6315.5 feet along same
North 85° 6' East true 3445.3 feet along same to end of ridge, Thence
North 19° 51' East true 1039.5 feet along same to black rock marked thus ? at edge of gulch, Thence
North 71° 21' East true 427.7 feet along Waiehu along edge of qulch,
North 16° 51' East true 569.6 feet along same to point near a large black stone marked ?
North 66° 36' East true 803.9 feet along same,
North 46° 6' East true 937.2 feet along Waiehu to stone marked thus ?
North 46° 21' East true 1029.6 feet along Waiehu
North 49° 36' East true 1025 feet along Waiehu to stone marked thus ?

North 20° 30' West true 128 feet along Waiehu
North 22° 15' East true 244 feet along Waiehu
North 11° 44' West true 310 feet along Waiehu
North 51° 50' East true 264 feet along Waiehu
South 44° 30' East true 753 feet along Waiehu along stone wall
North 73° 00' East true 674 feet along Waiehu along stone wall to tall stone marked ? From which the above mentioned marked stone ? bears South 70° 21' West true 1451.6 feet. Thence
South 66° 6' East true 1617.8 feet crossing the Government road to stone marked ? at sand hills, Thence
North 77° 52' East true 1589.3 feet along Waiehu across sandy hollow to stone marked ?, Thence
North 65° 45' East true 1003 feet along Waiehu to a stone marked ? at sea shore. Thence along sea shore to initial point. Subject to all existing leases and tenancies and to the rights of Native tenants.

[Page 419]

Containing 24,000 Acres, more or less; excepting and reserving to the Hawaiian Government, all mineral or metallic mines of every description.

To have and to hold the above granted Land in Fee Simple, unto the said Claus Spreckles, his Heirs and Assigns forever

Witness Ourself at Honolulu this 30th day of September 1882, in the Ninth year of Our Reign.

BY THE KING, Signed, Kalakaua Rex
The Minister of the Interior,
Signed, Jno E. Bush

[Land Patent Grant No. 3343, Spreckles, Claus, Wailuku Ahupuaa, District of Wailuku, Island of Maui, 24,000 Acres, 1882]

APPENDIX F

VIEW ANALYSIS

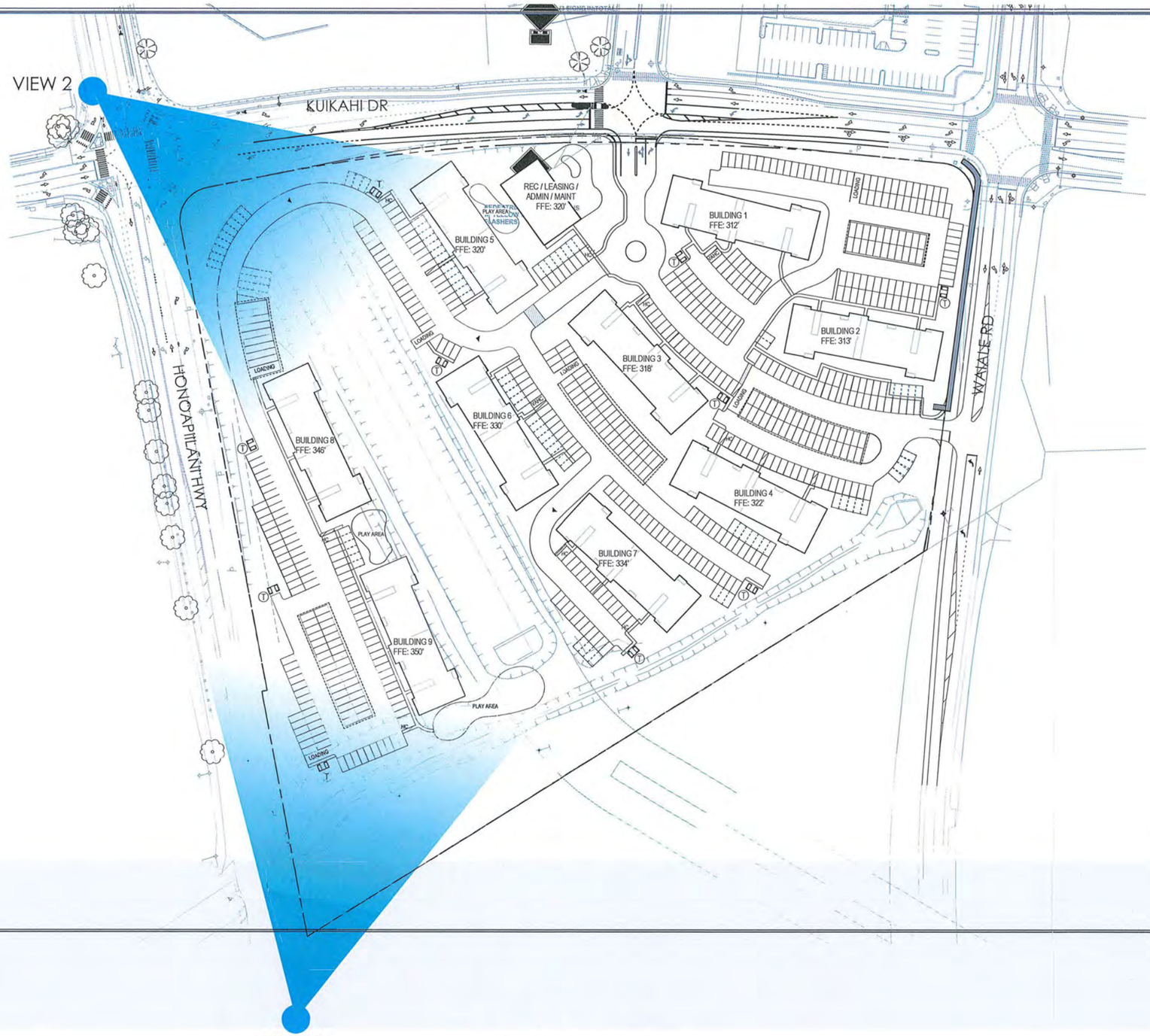
VIEW ANALYSIS

FOR PROPOSED

WAILUKU APARTMENT 201H PROJECT

PREPARED FOR:
LEGACY PARTNERS

FEBRUARY 09, 2018



SITE PLAN

NTS

FEBRUARY 09, 2018

VIEW ANALYSIS
FOR PROPOSED
WAILUKU APARTMENT 201H PROJECT

LEGACY PARTNERS



FEBRUARY 09, 2018

VIEW ANALYSIS
FOR PROPOSED
WAILUKU APARTMENT 201H PROJECT

LEGACY PARTNERS



Artistic conceptual rendering

HONOAPIILANI HIGHWAY - VIEW 1

ELEVATIONS BASED ON PRELIMINARY GRADING PLAN PREPARED BY WARREN S. UNEMORI ENGINEERING, INC. - APRIL 2017

SITE LANDSCAPING BASED ON PRELIMINARY LANDSCAPE PLAN PREPARED BY RUSSEL Y. GUSSHI ASLA LANDSCAPE ARCHITECT - JULY 2017

FEBRUARY 09, 2018

VIEW ANALYSIS

FOR PROPOSED
WAILUKU APARTMENT 201H PROJECT

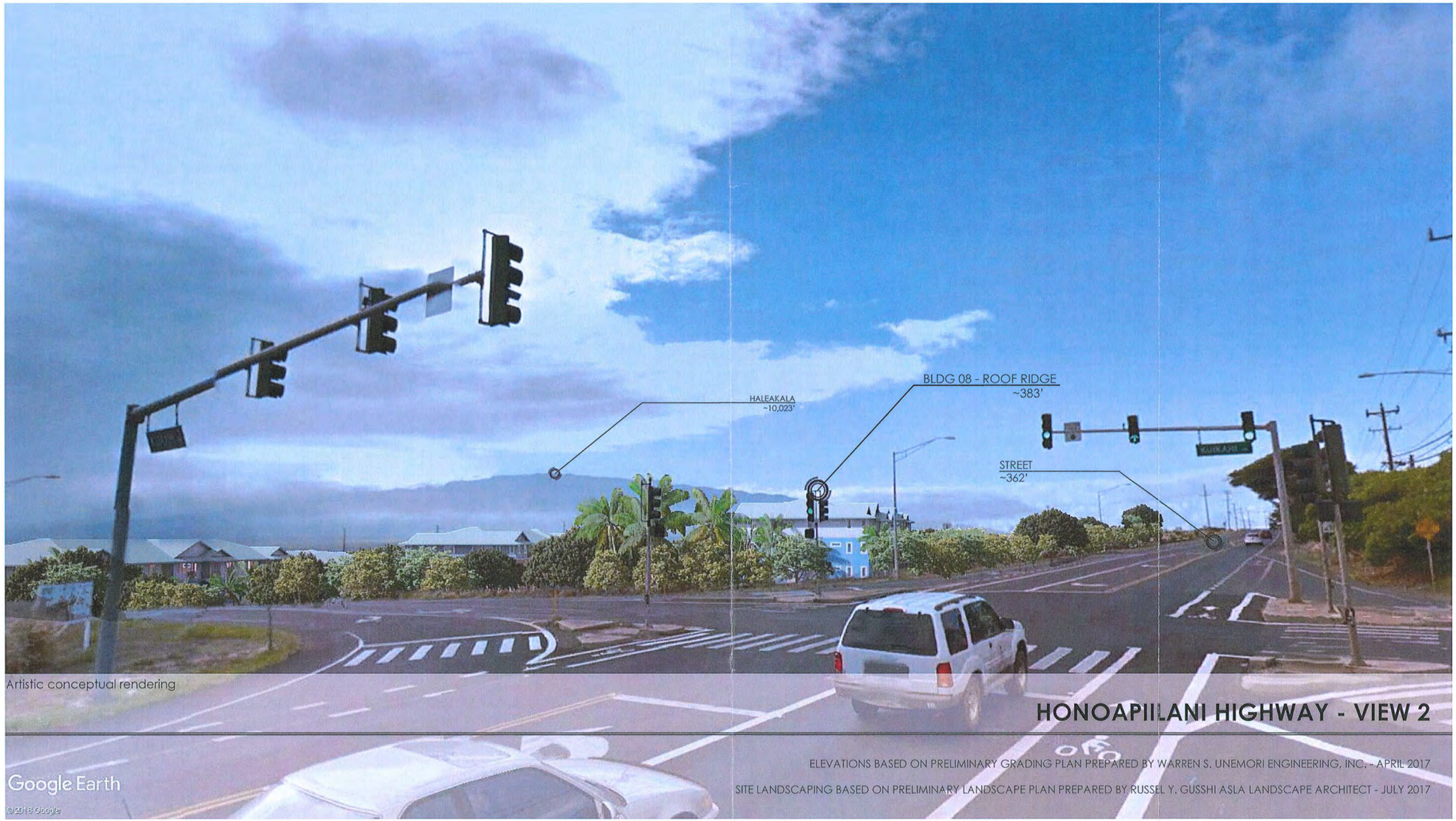
LEGACY PARTNERS



FEBRUARY 09, 2018

VIEW ANALYSIS
FOR PROPOSED
WAILUKU APARTMENT 201H PROJECT

LEGACY PARTNERS



Artistic conceptual rendering

HONOAPIILANI HIGHWAY - VIEW 2

ELEVATIONS BASED ON PRELIMINARY GRADING PLAN PREPARED BY WARREN S. UNEMORI ENGINEERING, INC. - APRIL 2017

SITE LANDSCAPING BASED ON PRELIMINARY LANDSCAPE PLAN PREPARED BY RUSSEL Y. GUSSHI ASLA LANDSCAPE ARCHITECT - JULY 2017

FEBRUARY 09, 2018

VIEW ANALYSIS
FOR PROPOSED
WAILUKU APARTMENT 201H PROJECT

LEGACY PARTNERS

APPENDIX G

CENTRAL MAUI RENTAL MARKET STUDY

PAUL CASSIDAY
Real Estate Market Research

1029 Iiwi Street
Honolulu, Hawaii
U.S.A. 96816

(808) 291-4407 cell
1-800-878-7920 fax
Website: rcassiday.com

July 31, 2017

STATEMENT OF STUDY AND QUALIFICATIONS

To Whom It May Concern:

I performed a market study on the Central Maui Rental Market, that included a description and analysis of the economic conditions in the county, as well of the for-sale and rental residential market. Further, I looked into the supply and demand for a rental project being contemplated in Central Maui, and did so in a way that could help the decision on whether to proceed with such.

Last week, I reviewed the rental market in Maui and discovered a number of indications that in the time since this study was performed there are fewer rental units at the lower price segment that are available, and those that there are are priced higher than previously priced.

Lastly, here is a statement of my qualifications, relative to analyzing residential projects, developments and markets in Hawaii.

I have spent 18 years as an independent, third party, outside consultant doing housing studies on supply and demand, project feasibility, long-range planning and product pricing and absorption, both for for-sale and rental housing. Before that, I had 8 years working as the in-house market analyst for the state's two largest residential developers. This experience and understanding of developer needs is unique amongst market analysts in the state, and it allowed the creation of several extensive data bases on the residential market. My proprietary data includes for-sale transactional (sales) data, for-sale and rental listing (offering) data, housing stock or housing inventory data, future project data, entitled land data and, most uniquely, developer (or new home sales) data on their sales and prices. I was able to collect this privately held data from developers, as it formed the basis of my consulting work for them (and resulted in over 350 studies).

I enjoyed the work, and appreciate the consideration you are giving to my study.

Yours truly,



Paul Cassiday Jr.

Executive Summary

Demand for rental housing, both market-rate and affordable, is deep, broad and elastic.

On the affordable side, local families acutely need housing, from mid-range cascading down the housing the ladder in increasing magnitude. The sweet spot is near or at an AMI where the renter makes good income, just not enough for a market rate unit. This is the 80%-100% AMI. The 120% of AMI can go market rental, but the quality there is very poor, as there is strong demand from outsiders who willingly accept inferior because they don't know better.

On the market side, local and offshore (outside) renters need value, which includes the prerequites of reasonable price, comfort, cinvenience and security. WIth few market rental projects, this is very hard to find. security often is the deciding point for mothers who work. This location offers convenience, comfort and security AND a the island's best school district.

Supply of affordable rental housing is narrow, shallow and inelastic (oxymoronic, too). Maui simply did not produce much affordable shelter in the last decade, not even commensurate with the other counties, and not even as much as it could. They informally invalidated the standard development model of developers trading an affordable housing requitment for entitlements (cross-subsidization, one of the other), and did so by upping their affordable requirement in 2007-2008. Almost all development stopped, especially the high-end, thus denying the affordable housing sector their best source of funding.

Looking into the future, there are few rental projects in planning and no rental projects underway. It is likely that there will be one such project, an affordable rental project for the elderly, in the future, if awarded LIHTR money this cycle (decision made this summer), but it is designed to serve a lower AMI target market. There is another project coming through the approval process but that isn't going to be ready to go until 2021, maybe later. And it is in a different location.

Because there are few rental housing projects on Maui, there are few comparables, and even fewer data sets on rentals that are standardized and easy to examine. This is because there is little demand for this (and, for the same reason, there is little competition). Thatt said, the evidence, data and aneqdotal, is supportive of our belief that the currently observable rents are not commensurate with what could be achieved.

UNIT MIX AND RENTAL RATE MODEL

Bed	AMI	Units	Rents, Affordable	Rents, Market
1	80%	60	$1,000	
1	100%	50	$1,305	
1	Market	20		$1,799 to $1,899
2	120%	71	$1,797	
2	Market	80		$2,100 to $2,299
3	Market	20		$2,600 to $2,799

With these rates, we believe this project has a great chance of success – and, we believe, they should be set higher (the market units particularly) at the time the project opens for business in 2019.

I. INTRODUCTION & SCOPE OF WORK

Ricky Cassiday is a market researcher who specializes in analyzing residential real estate markets for developers and lenders. He has been retained to perform a study analyzing the rental market on the island of Maui, relative to a planned mixed income rental housing development in Central Maui.

The study focuses on the accessing, analyzing and projecting the rental market relative to the proposed development of 300 rental units that will exist within a larger master planned development involving Business/Commercial and Residential land uses.

This entailed collecting, comparing and analyzing information that has a bearing on the numerous aspects of market demand for the proposed project, including but not limited to publicly available real property, economic and commercial data. The author makes every effort to verify that all of the information in study and in particular the market description and analysis is accurate, but is aware that 100% accuracy is unlikely.

Scope of Work

The study scope of work is to assess the residential rental market and project the rate of absorption and the level of rents that the proposed project could capture. This was done by updating the Rental Housing Study done for the County in 2014, using 2016 instead of 2013 data, and targets it for this Central Maui site.

On the demand side:

- Look at economic trends now and 5 years out, in terms of population, jobs, incomes and housing. Quantitatively and qualitatively, relative to 300 units.

- Update and look at the demographic data from US Census and Ribbon Demographics for the island and central Maui, and extrapolate for the site.

On the supply side:

- Describe and analyze the housing stock in the area, as it relates to rental housing demand, and on the capacity of the housing in the core area to house and shelter the current and future population in Central Maui.

- Describe and analyze the supply pipeline for all housing on the island as it relates to project and the target market, and determine if there will be competing projects that will interfere competitively with this proposed project.

- Describe and analyze the current rental offerings (listings) from Craigslist and other public ally available rental housing info sources, including Zillow and AirBnB.

Summarize findings and use them to determine target market demand for unit sizes, and counts.

II. PROJECT & AREA DESCRIPTION

Proposed Development

The proposed project site is located in Wailuku, in Central Maui, and is the capital for the County. It is within the major urban growth boundary, with roughly a third of the population in the immediate area. It sits next to the two major master planned communities in Central Maui, Maui Lani and Kehalani, with another one planned at Waikapu.

The total contemplated units are 302, originally broken out as follows:

PROJECT PARTICULARS

Unit	Bed	AMI	Units	Sq Ft	Rent
A	1	80%	60	400	$1,000
B	1	100%	51	450	$1,305
C	2	120%	51	700	$1,797
D	2	140%	140	750	$1,910
			302		$2,276

However, in subsequent discussions with the county, the county allowed that the mix could be changed to allow the 140% of AMI units to become market-rate rentals. This change significantly impacts the project positively: it lifts the ceiling for rental rates in a number of ways, including allowing for a 3-month minimum lease (as opposed to a 6 or 12 month).

Subject Property's Community

Maui County is the third largest county in the state, as ranked by population and economic activity, behind the City & County of Honolulu (Oahu) and the Big Island of Hawaii. Historically, Maui- Lahaina - was the original port of the nation of Hawaii, as well as the first resort area in the state. Maui has since grown into the state's second largest tourist destination, thanks to the major resort areas in West and South Maui.

Agriculture, specifically sugar cane and pineapple crops, had been the historic mainstay of Maui's economy starting in the 19th century. However, high costs and third world competition gutted those businesses, and, in their place arose diversified agriculture (macadamia nuts, vegetables and flowers). The tourism and service industries replaced agriculture as the driver for the county's economy. The visitor industry encompasses three primary destination-resort master planned communities, several similar vacation oriented communities, and the ancillary businesses of real estate, retail, restaurant, service and travel industries. With the growth of tourism, population growth was stimulated, rising almost 75 percent since 1975.

Today, Maui has one of the strongest brands in the global visitor industry, as well as a somewhat diversified economy, at least relative to the other neighbor islands in the state (with agriculture, services and high technology being the other mainstays). That said, the main driver on the island of economic activity is money spent by visitors and homeowners from outside the island on recreation or lifestyle. Indeed, like the rest of the state, the county economy's comparative advantage involves a very high quality of life, relative to the rest of the world.

This quality of life, both for visitors and residents alike, is based on the number of unique advantages that Hawaii has relative to other visitor or second home locations: it's socially safe,

politically stable, US dollar denominated and under American jurisprudence. Additionally, it is naturally beautiful, with a benign environment and near perfect climate. Indeed, the proof of its attractiveness can be found in the quality of the number of 'rich and famous' who have bought in Hawaii, starting with Lawrence Rockefeller in 1960 (followed by John Wayne, Paul Allen, George Harrison, Charles Schwab, Michael Dell, Oprah Winfrey, Akio Morita, Mark Zuckerberg, etc.).

Maui has three major resort destinations:

- **Wailea/Makena**, a 45-minute drive from the Airport, runs along the South Maui coastline, with Haleakala Mountain and, open pastures lands above and Maalaea Bay below.
- **Kaanapali**, along the western shore, 10 miles south of Kapalua Airport, was once the favored area of Hawaiian royalty and today hosts one of the largest percentage of accommodations, shops and historical sites in a single destination.
- **Kapalua**, also along the western shore, 10 miles north of Kapalua Airport, was once a working pineapple plantation and now has two major hotels and a significant residential population.

The majority of the primary housing development is located in Central Maui, within the Kehalani and Maui Lani master planned communities. The majority of the second home housing development is located in and around the resorts in West and South Maui, primarily the areas of Napili and Kihei.

Second home development is a major component of the housing development on the island, accounting for around 25-30% of total sales and 50-60% of the gross revenues (on average, 2003-2013).

By way of context, overall housing construction activity hit a peak on Maui when major resorts were developed in the 1970s; recent high-volume peak years reach to a level that is only half that of the 1970s (see permit section). Furthermore, many of the condominium projects that were developed on Maui since then have been targeted to satisfy the demand from the offshore buyer, not the local market for primary housing (sales records show that upwards of 70% of all condo sales on Maui go to out of state buyers).

Census records have shown that a quarter of Maui County's housing stock and more than 40 percent of housing in West Maui did not house residents in 2000. Thus, while the Census categorizes these units as "vacant," they may be rented to vacationers, reserved by owners as a second home, or both. Demand in the housing market, both for-sale and rental, hence comes from three sources - residents, investors, and non-residents. Thus, this demand pushes up the average prices for Maui housing above and beyond most residents' ability to pay.

Subject Property's Market Area:

The geographic area surrounding the subject property is defined by physical and man-made boundaries, and encompasses an area known as Wailuku-Kahului. This region is located on the north shore of the Island of Maui and encompasses the civic and business centers of Wailuku and Kahului.

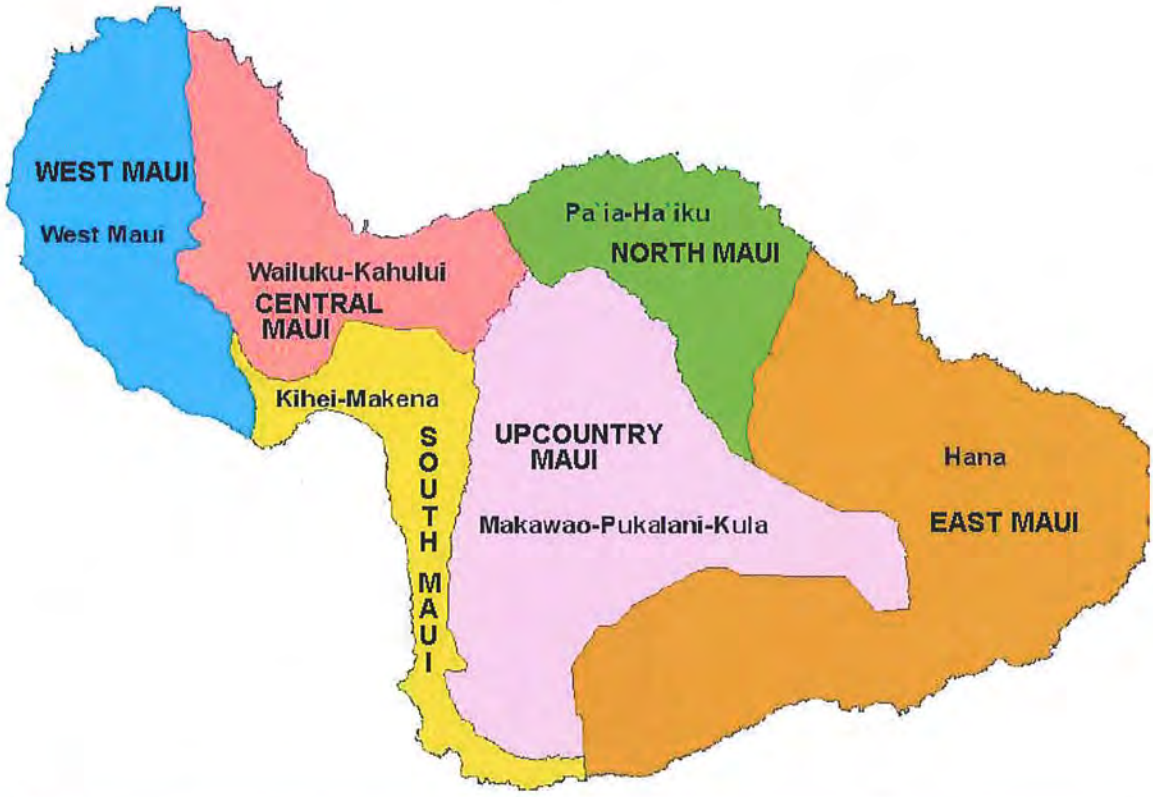
The island's major seaport and primary airport are also contained within the boundaries of this region. The surrounding agricultural land of Central Maui and the eastern half of the West Maui Mountains are also within the Wailuku-Kahului neighborhood.

Population is concentrated in the urban centers of the region. Wailuku is the civic-financial-cultural center while Kahului is the business and industrial center. Kahului Harbor and Airport are major land users in the area. In addition, the region also includes the more rural settlements of Waihee to the north and Waikapu and Puunene to the southeast. Agricultural lands are adjacent

on the lower slopes of the West Maui Mountains and also to the south and east of Kahului. This green border is significant because of its open space and economic value.

In the immediate area, the surrounding properties have mixed uses. North of the subject is the Kehalani Village Center, a commercial retail/office development. Longs Drug Store, the first anchor store in the project, was completed in 2012. Since then, retailers Aloha Gas, Foodland and Coffee Bean & Tea Leaf have opened their doors. As of the effective date, construction of a McDonald's restaurant is ongoing. to the east, is the Maui Lani Village Center, a 79-lot, mixed-use subdivision with commercial, industrial, and residential uses. To the south is vacant agricultural land owned by religious organizations, with the Waikapu Gardens single-family residential subdivision beyond. West of the subject, across Honoapiilani Highway, is another agricultural tract that is seeking rezoning for the proposed Puunani subdivision consisting of multi-family residences and rural lots.

The following table and chart describes the general areas of Maui and defines them in terms of the 4 zones that the county tax assessor uses, called TMK zones, as referred to in this study.



TMK	Orientation	Major Areas
ZONE 1	East Maui	Hana, Keanae
ZONE 2	Upcountry & Resort	Kuau, Makawao, Makena, Wailea
ZONE 3	Central Maui	Kahului, North Kihei, South Kihei, Maalaea, Paia, Wailuku
ZONE 4	West Maui	Honokowai, Kaanapali, Kahana, Kapalua, Lahaina, Napili

The subject property is in ZONE 3, referred to as TMK Zone 2-3, as it includes much of the southern part of Central Maui, which is the adjacent one, TMK Zone 2-2.

Subject Property's Housing Stock:

This section looks first at the inventory of multifamily units in Central Maui that would be comparable to the units for the proposed development. It uses data from the Maui County Tax Assessor to describe them by bedroom count, unit size, assessed value and share of owner occupant vs. investor unit.

Note, the data does not include apartment-zoned units, which are condo units with one owner, as the county tax assessor lumps all of those units into one property (for tax purposes). However, the number of units that go unrepresented in the data by the distinction of being company-owned rental apartments is very few. Most of the wholly owned properties on the island are those oriented towards the visitor industry (such as hotel units).

We start with the total stock of condominiums on the island for the number of bedrooms contemplated by the subject property: One, and Two Bedrooms. The following tables show the market, starting with the entire island of Maui. As seen, most units are investor units, which are non-owner-occupants residing in them. Also, the values assessed on the Owner Occupant units are much lower than the investor, or Non-Owner Occupants.

OWNER OCCUPANT VS. NON-OWNER OCCUPANT (OO), ISLAND OF MAUI

	Non-OO			Owner OCC				
Bedrooms	Units	Assessed Value	Interior Sq Ft	Units	As'sed Value	Interior Sq Ft	**Total Units**	**Non OO Shares**
1	6,780	$487,873	721	642	$348,707	667	7,422	**9%**
2	7,226	$703,332	1,034	1,816	$398,958	910	9,042	**20%**
3	1,672	$1,556,773	1,806	790	$561,298	1,311	2,462	**32%**

Next, we look at a smaller comparable unit set for the subject property, those units located in Central Maui, TMK 2-2 and 2-3.

OWNER OCCUPANT VS. NON-OWNER OCCUPANT (OO), CENTRAL MAUI

	Non-OO			Owner OCC				
Bedrooms	Units	Assessed Value	Interior Sq Ft	Units	As'sed Value	Interior Sq Ft	**Total Units**	**Non OO Shares**
1	3,425	$432,036	688	358	$315,077	637	3,783	**9%**
2	4,730	$613,803	966	1,429	$360,551	866	6,159	**23%**
3	547	$525,149	1,208	487	$413,633	1,178	1,034	**47%**

Finally, we look at the comparable unit set for the subject property, those units located right in the middle of Central Maui, TMK 2-3 excluding South and Central Kihei.

OWNER OCCUPANT VS. NON-OWNER OCCUPANT, WAILUKU-KAHALUUI-NORTH KIHEI

	Non-OO			Owner OCC				
Bedrooms	Units	Assessed Value	Interior Sq Ft	Units	As'sed Value	Interior Sq Ft	**Total Units**	**Non OO Shares**
1	774	$343,518	599	126	$222,260	571	900	14%
2	1,187	$313,130	832	638	$274,447	804	1,825	35%
3	547	$525,149	1,208	487	$413,633	1,178	1,034	**47%**

Next, we compare the number of units in the market area to the number of units this project looks to supply into the market.

PROJECT SHARE OF CENTRAL MAUI CONDO HOUSING STOCK

Bed Rooms	Non- Owner Occupied Unit Counts	Owner Occupied Unit Counts	Total Units In Area	Project Unit Count	Project Share Of Market
1	3,425	358	3,783	130	3.44%
2	4,730	1,429	6,159	151	2.45%
3	547	487	1,178	20	1.70%

As seen, the share of market that the proposed development seeks to capture is a very slight one: about 3% additional supply, in the case of 1-bedroom and 2-bedroom units. For 3-bedroom units, it's less than 2%.

To determine the market's disposition in terms of accepting this project, we turn to describe the drivers of housing demand starting with the economic context that would underwrite this demand.

III. THE ECONOMIC BACKGROUND:

Simply put, real estate sales and values move closely in synch with an area's economic growth, and the mechanism by which this growth occurs is via rising incomes and higher job counts. Both feed directly into demand for housing.

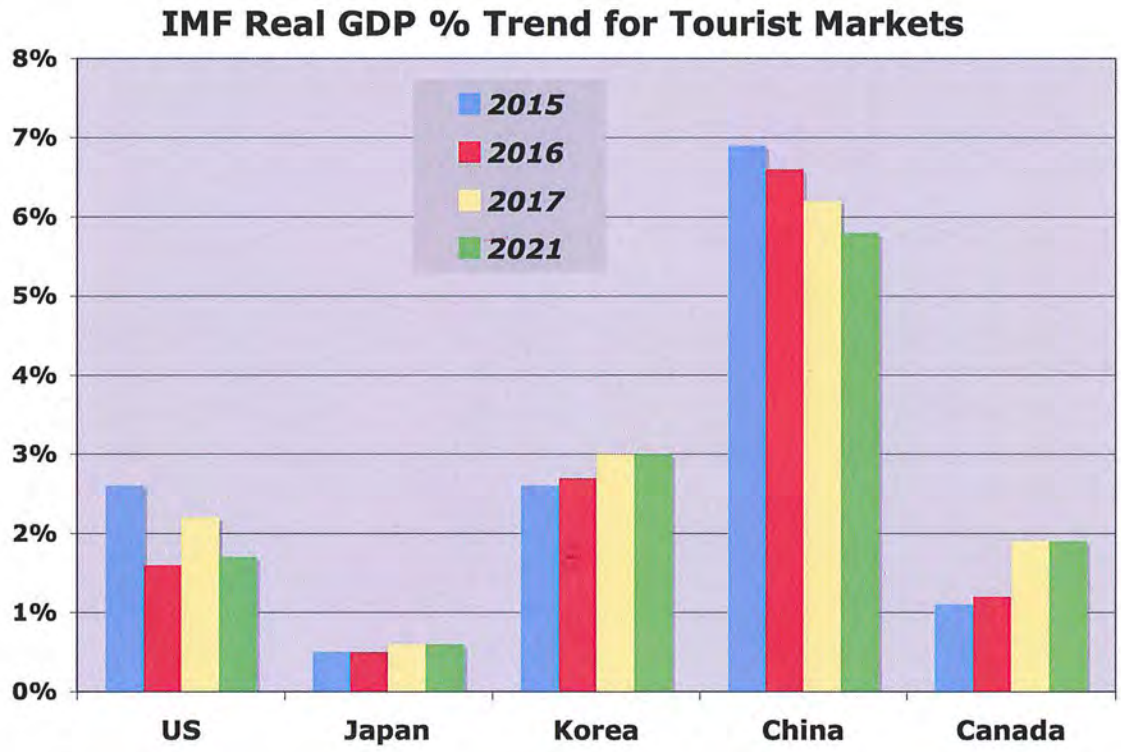
In the short run, economic growth is determined by trading activity, the most important of which is the level and balance of trade between the area and it's major trading partners. In the case of Maui County, the major trade is in recreational goods and services, the largest of which is the visitor industry. The health of this industry is tied to the health of the economies that send visitors to Maui County. The second most important industry is federal spending, mainly national security items, as The state of Hawaii has the second largest concentration of service personal globally. Then, in the longer run, economic growth is also determined by population changes (both migration and demographic) and lifestyle preferences.

As Maui County's major industry is tourism, the major trading partners here would be the US, Canada and Asia (mainly Japan) on the international level: then California, and the west coast states, on the national level: and finally on the state level. As such, we examine the economic health of these trading partners in order to get an understanding of their ability to trade (send visitors, home owners and capital funding) with Maui County, currently and for the future.

Global Economy

The overall global economic forecast by the IMF was lowered in October 2016. They expect that global economic growth will slow to 3.1 percent in 2016 before recovering to 3.4 percent in 2017. The forecast was revised down by 0.1 percentage point for 2016 and 2017 relative to the previous forecast in April 2016, and reflects a more subdued outlook for advanced economies following Brexit and weaker-than-expected growth in the United States. They believed that those developments would put further downward pressure on global interest rates, with monetary policy expected to remain accommodative for longer. However, with the election of Donald Trump, there is a good possibility they will reconsider and possibly reverse this forecast.

The question going forward is whether the benefits of lower energy prices is a net positive or negative, with the negative manifested by lower growth in emerging markets, commodity based economies and industries that benefit from a weak US dollar. The positive manifestations manifest as lower cost of production, higher supply, greater purchasing power and greater private demand, centered in the oil importing nations. The scenarios posited by the IMF showed a net positive effect on global economic growth on average of 0.5% and 0.6%.

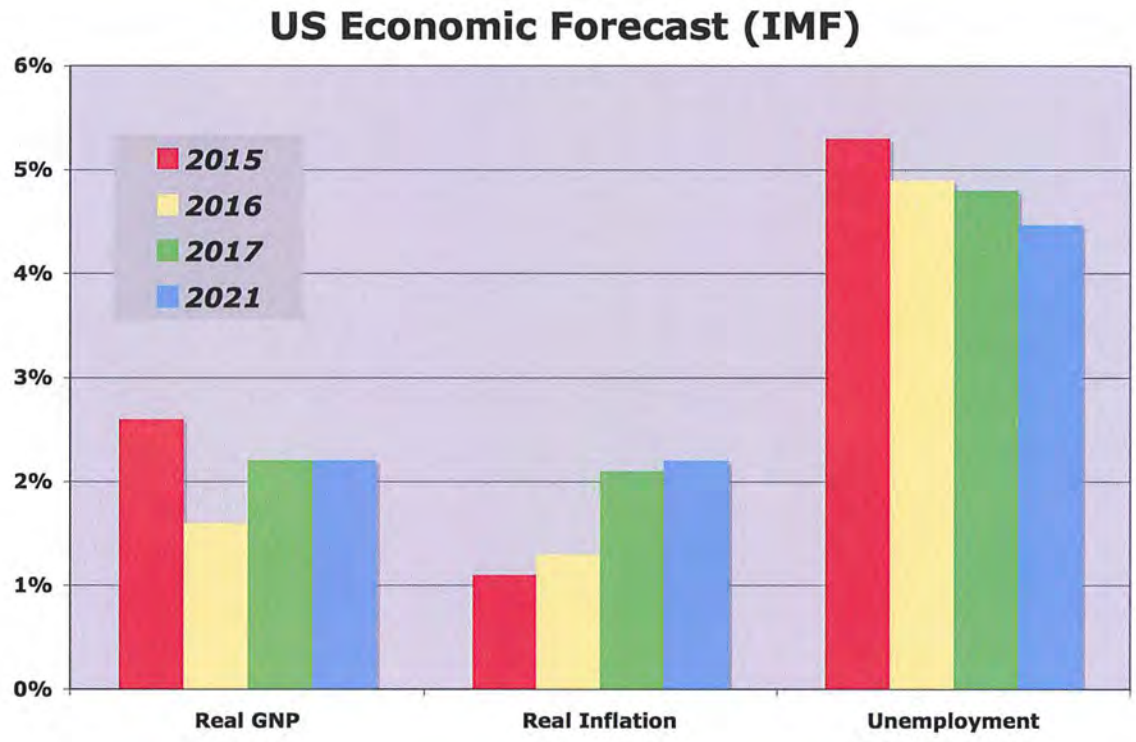


It predicted that if the advanced economies continue to repair their public and financial balance sheets, and stimulate employment, global financial markets and property markets will continue to grow, albeit slowing. The low demand for commodities, the glut of savings and the surplus of labor internationally will result in low demand for final output, a condition that risks deflation (but also on that keeps the cost of money low).

United States

Softer-than-expected activity in the second half of 2015 and the first half of 2016 points to some loss in momentum, despite a mildly supportive fiscal stance and a slower projected pace of monetary policy normalization. Job creation has been healthy, the housing market is improving, and consumer spending remains robust. However, a prolonged inventory correction and weak business investment has caused a downward revision of the 2016 forecast to 1.6 percent. The weakness in capital spending reflects in part still-negative energy investment, dollar appreciation, and financial turbulence earlier in the year, and heightened uncertainty related to the new administration. In 2017, growth is expected to pick up to 2.2 percent, as the drag from lower energy prices and past appreciation of the U.S. dollar fades. Medium term potential growth, projected at 1.8 percent, is held down by an aging population and a continuation of the recent trend of low total factor productivity growth.

That said, the key markets for Hawaii, the higher income households in the western part of North America remain positioned to spend more and more of their discretionary income on vacationing and second homes, particularly to the outer islands.



State of Hawaii

According to economists, Hawaii's economy is expected to continue positive growth for the rest of 2016 and into 2017. This is underwritten by recent developments in the national and global economies, but is really based on the performance of Hawaii's tourism industry, labor market conditions, and the growth of personal income and tax revenues.

The state's economic forecasters at the Department for Business and Economic Development & Tourism (DBEDT) expects that visitor expenditures statewide will grow at a higher rate than projected in their previous forecast for 2016 and 2017. For GDP growth, the current forecast was slightly higher than the previous forecast, and is projected to show a 2.0 percent increase in 2016; 0.1 of a percentage point above the last quarter. The real GDP growth forecast in 2017 is 1.9 percent; same as the previous forecast.

Visitor arrivals are expected to increase 2.3 percent in 2016, 0.4 of a percentage point above the previous forecast. Plus, the forecast for visitor days in 2016 was increased 0.3 of a percentage point to 1.9 percent – and, visitor expenditure growth in 2016 was revised upward to 3.9 percent, from 3.2 percent growth. For 2017, the growth rate of visitor arrivals, visitor days, and visitor expenditures are now expected to be 1.8 percent, 2.0 percent, and 4.0 percent, respectively.

The projection for the non-agricultural wage and salary job growth rate for 2016 is 2.0 percent, 0.2 of a percentage point above the previous forecast. In 2017, jobs are projected to increase 1.2 percent, same as the previous forecast. Unemployment was ranked 5th lowest among all the states in the nation.

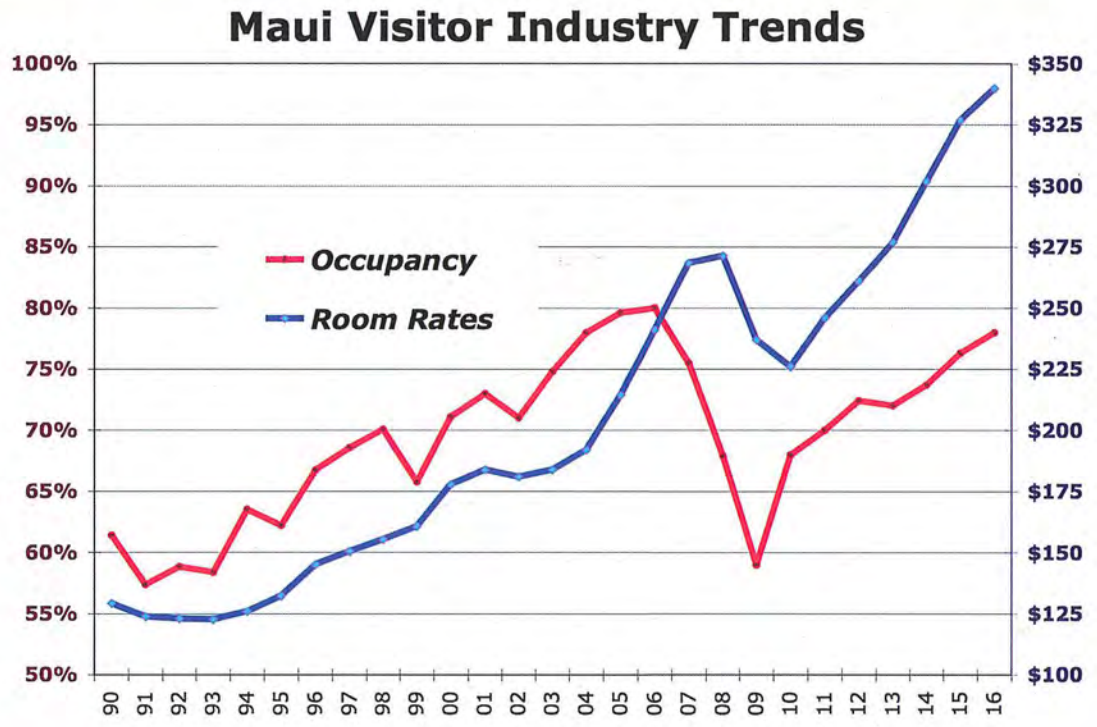
Looking ahead, air service to Hawai'i from the from the U.S. and Canada continues to show double-digit growth in the months ahead (seats from North America are currently expected to increase +10.8 percent in the March through August period) Neighbor Islands will continue to see the bulk of additional scheduled air seats, capturing 64 percent of added capacity in the next six months.

County of Maui

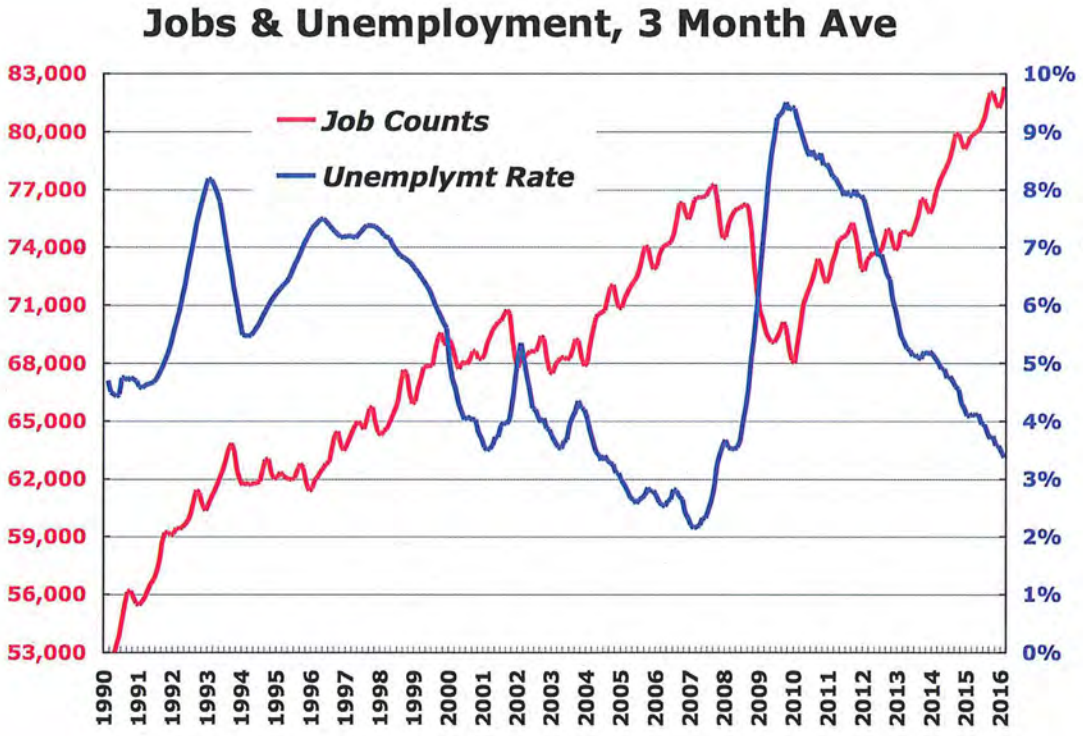
More than most of the rest of the county, the economy of Maui has been growing strongly, thanks to a boom in tourism, which is leading to a recovery/growth in other sectors of the economy, notably construction.

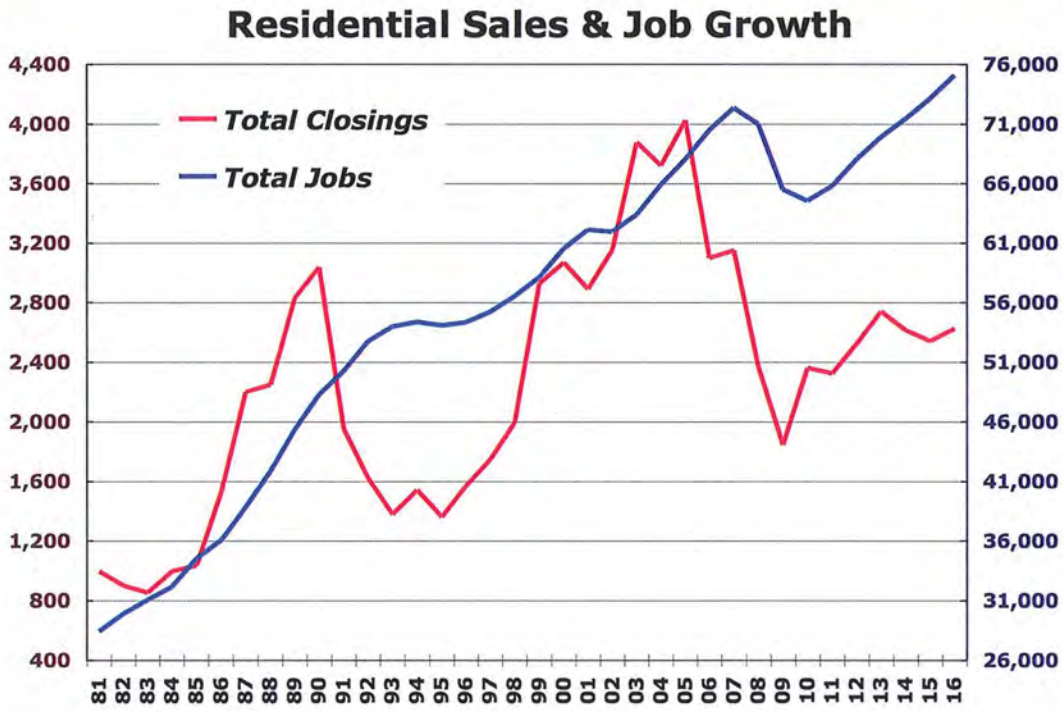
Much of this growth is due to external economic factors, such as the demand for recreational goods and services (hotel rooms and transportation, for example) from the major offshore economies (mainly West Coast of North America and Japan). In the third quarter of 2016, visitor days and visitor arrivals by air increased 6 percent in Maui, and visitor days increased 5.2 percent on Maui.

Additional growth is the result of the rise in construction expenditures, some of which is government spending and some is due to housing, both primary and secondary homes. There is also growth due to federal spending and agricultural activity – although some drag in this sector due to the closing of the sugar plantation at the end of last year.

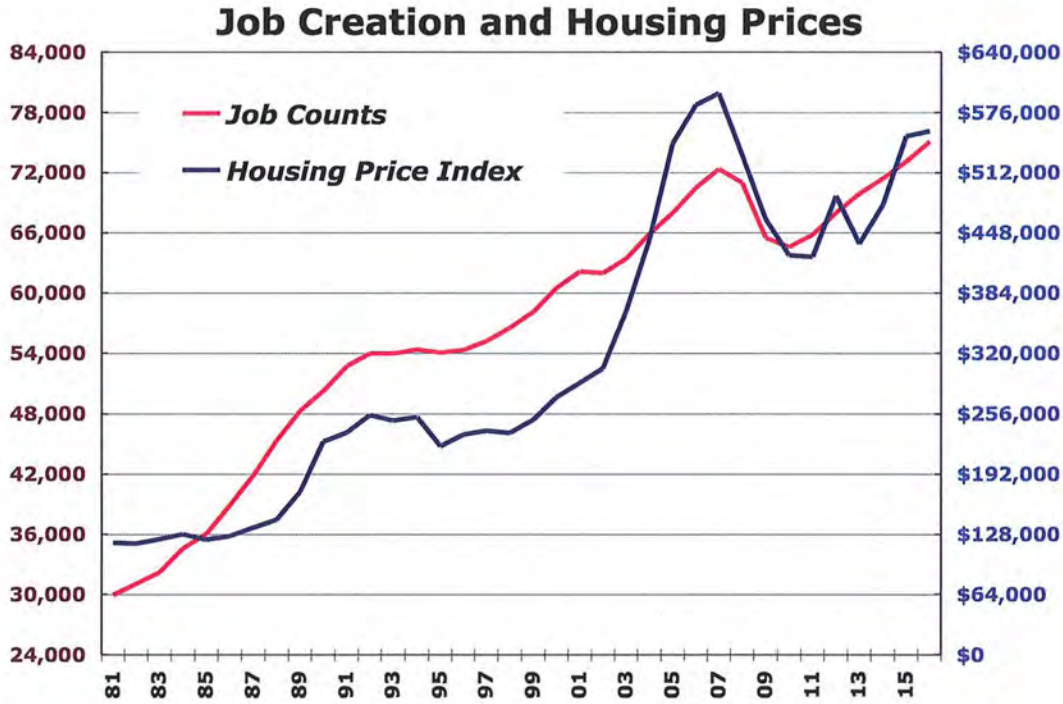


Also, in the third quarter of 2016, the unemployment rate in Maui County decreased 0.2 of a percentage point from 3.6 percent to 3.4 percent. At the same time, it saw a net gain of 2,200 jobs or a 3.0 percent increase.





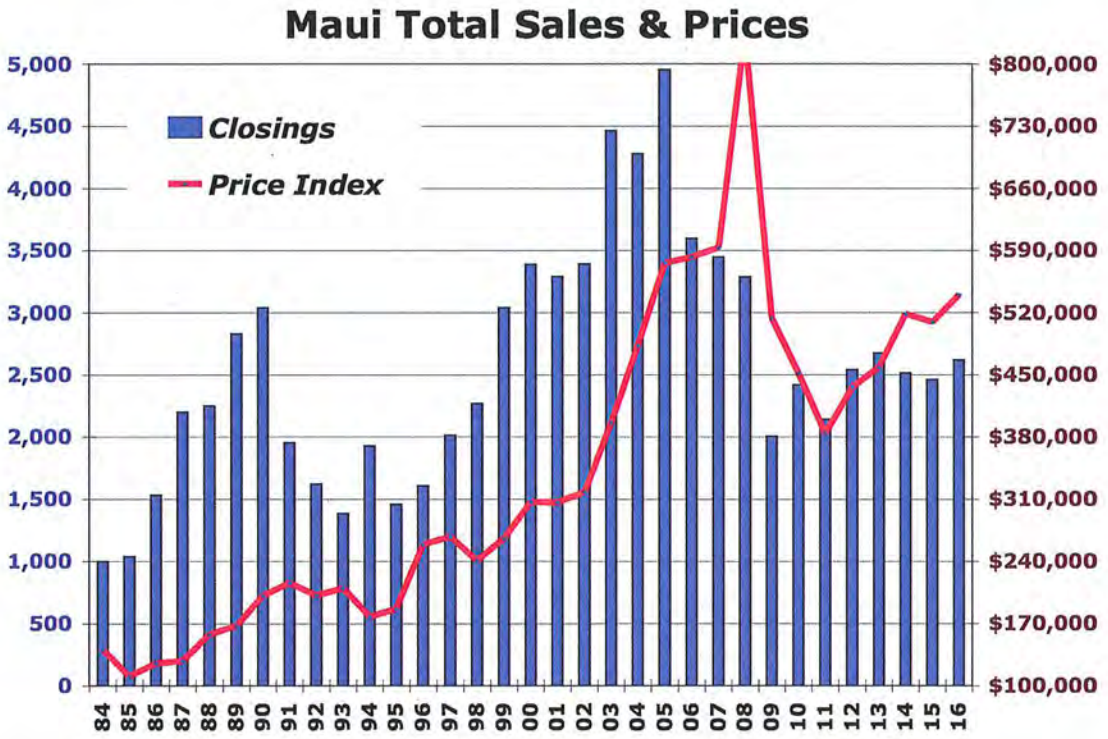
Per usual, the Maui economy and its real estate market act in tandem. As seen in charts, these markets are typified by multi-year periods of mounting activity (leading to housing sales and appreciation) followed by a fall-off in economic activity (and again housing sales and values). Currently, the economic upswing is feeding job growth and housing market expansion.



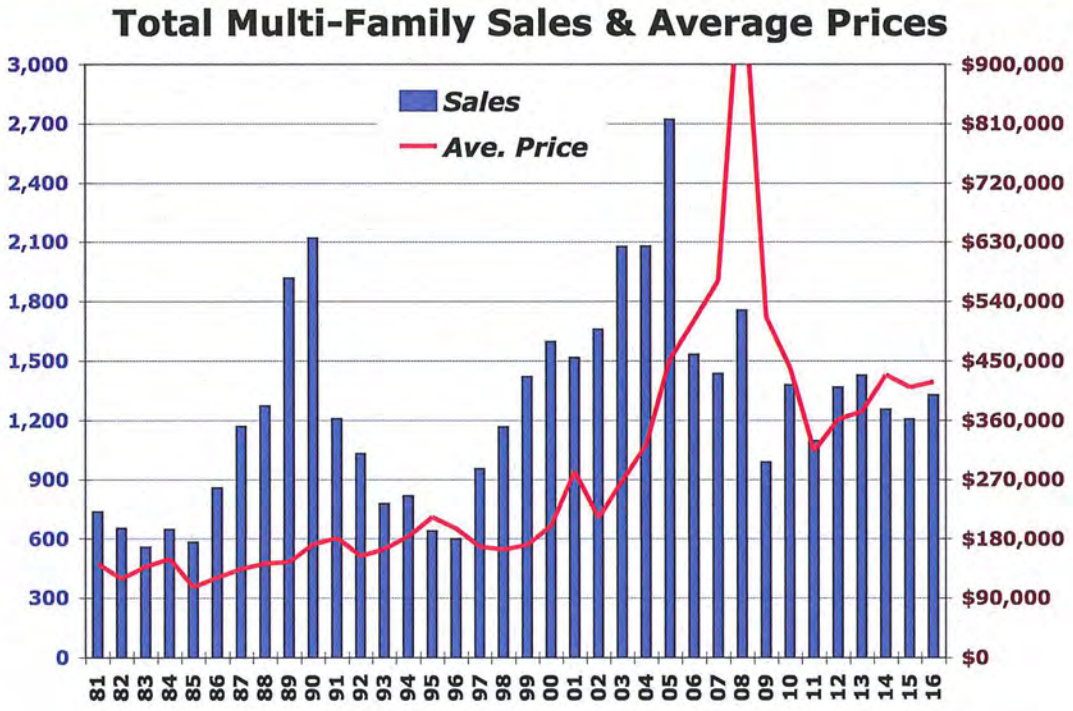
IV. MAUI HOUSING MARKET

Overview: Maui's residential market is arguably one of the most imbalanced in the nation. The chart below shows total sales and average prices of all residential property over the last 30 years. It aggregates both developer and resale broker sales for single family and multifamily units into one time series. While sales rates can double over a cycle, average prices can more than treble. This then makes housing extremely unaffordable... especially since wages statewide have risen only 4.2% p.a. over the past 35 years.

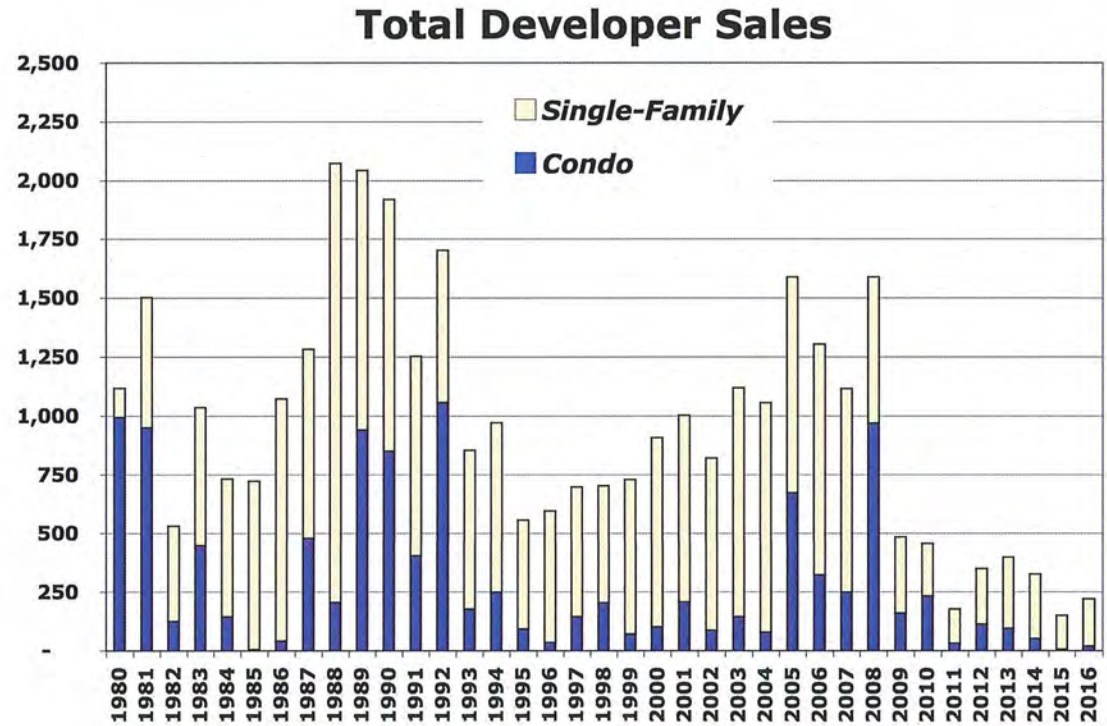
It is for that reason that, in 2016, Hawaii was ranked #1 in the nation for having the widest gap between wages and the price of rental housing by The National Low Income Housing Coalition. This was documented in its annual report, Out of Reach, showing that the gap between wages and the price of housing in Hawaii was greatest in the United States. This also goes for the for-sale housing market.

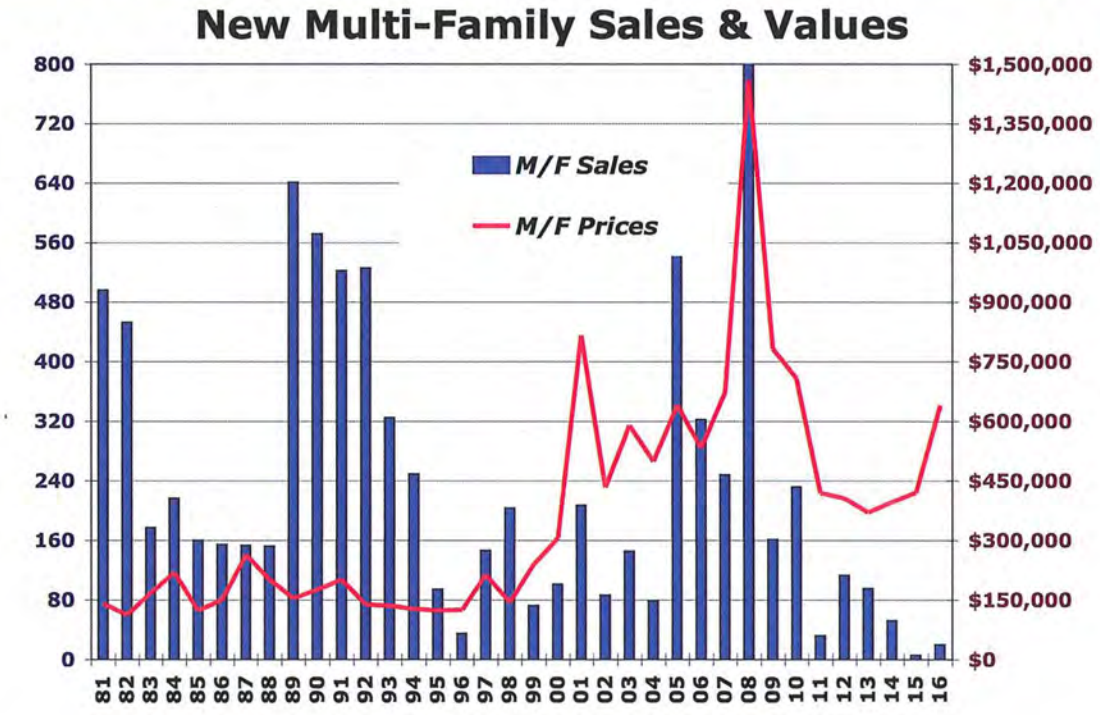


The underlying cause of this is the market is supply constrained and demand abundant... in the extreme. The first condition, limited supply, arises due to Maui being an island, having a very small landmass. This is coupled with inadequate infrastructure and challenging geographic conditions and significant political, social and legal opposition to development. The second, high demand is driven by both local and offshore households attracted by Maui's very high quality of life (as in being a place that is environmentally safe, aesthetically pleasing, socially accommodating, politically stable, etc.). This deep and broad appreciation of that lifestyle itself is the result of by very large influx of tourists every year. They have become accustomed to that lifestyle from repeated visits to the island (mainly West Coast and East Asia). Indeed, Maui has one of the highest rankings in brand awareness and acceptance in the world.

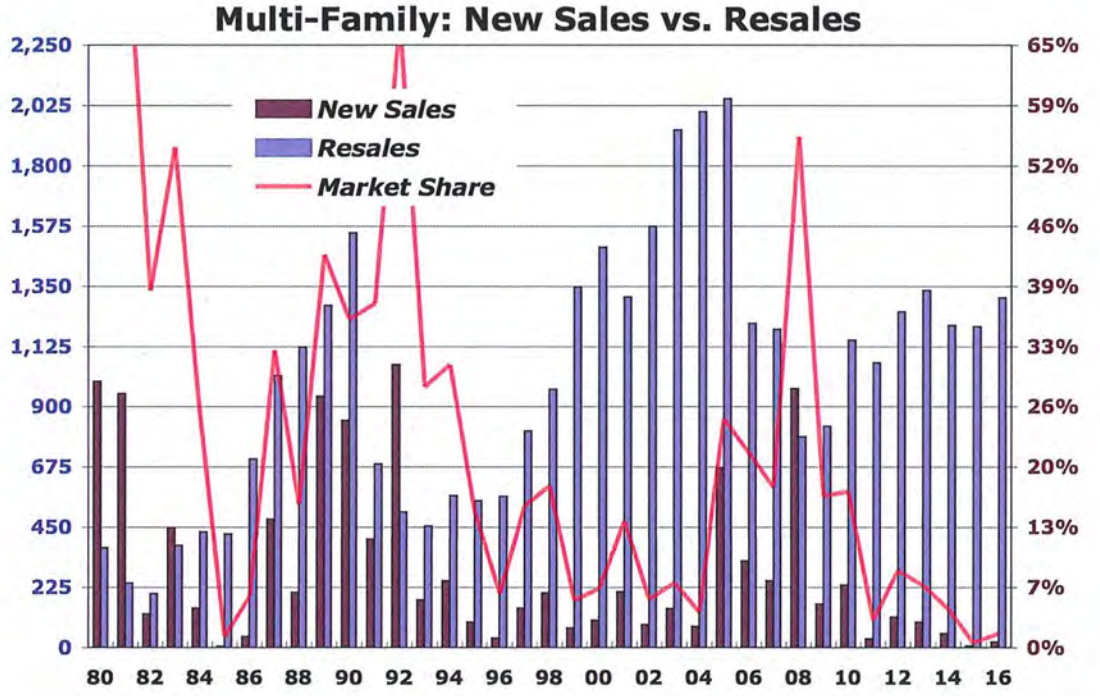


The above chart shows the same time series, but for just attached housing (defined as condos, town homes and apartments, as they serve workforce housing demand, same as market rentals). The chart below also shows how very little housing has been supplied by developers.

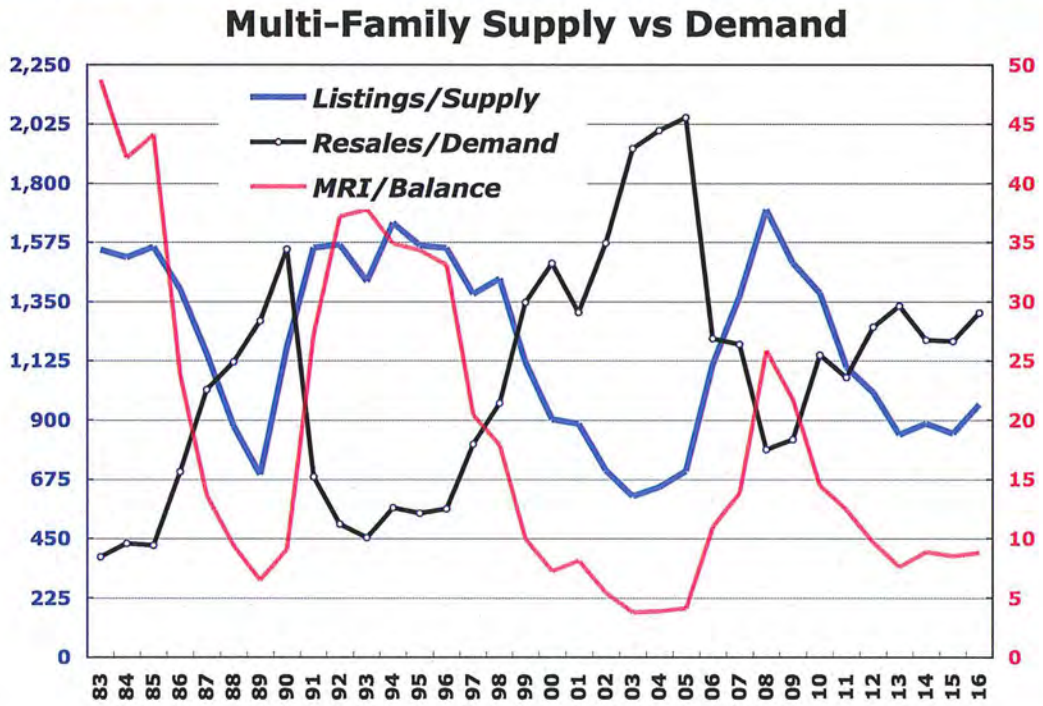




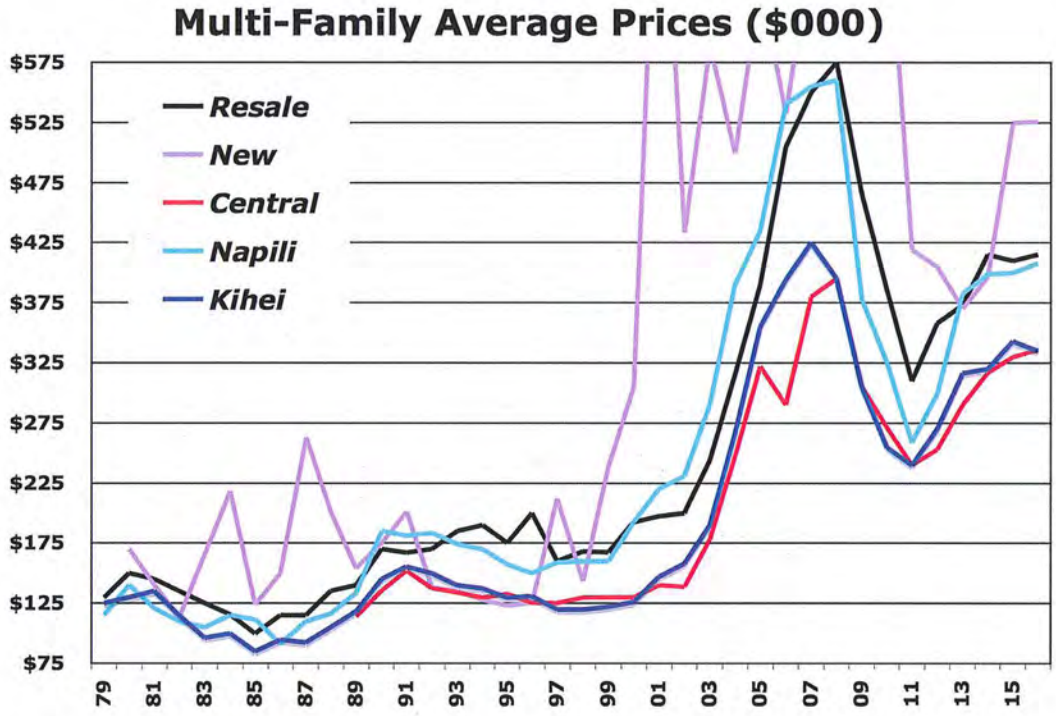
The above chart shows sales and prices for multi-family housing. Note how the prices have not been affordable for working families, the last 15 years. In the chart below, we see just how low the developer's share of total market activity has been.



With little produced, and highly priced, the resale market has to shoulder the burden of providing shelter to the workforce and lower middle class.



The above chart compares listings to sales, and shows the balance between the two - called MRI, or months of remaining inventory. A low MRI (low supply) leads to strong price appreciation.



And ultimately, high prices for for-sale units leads to high rental rates.

Turning now to Housing Supply, and then to housing demand.

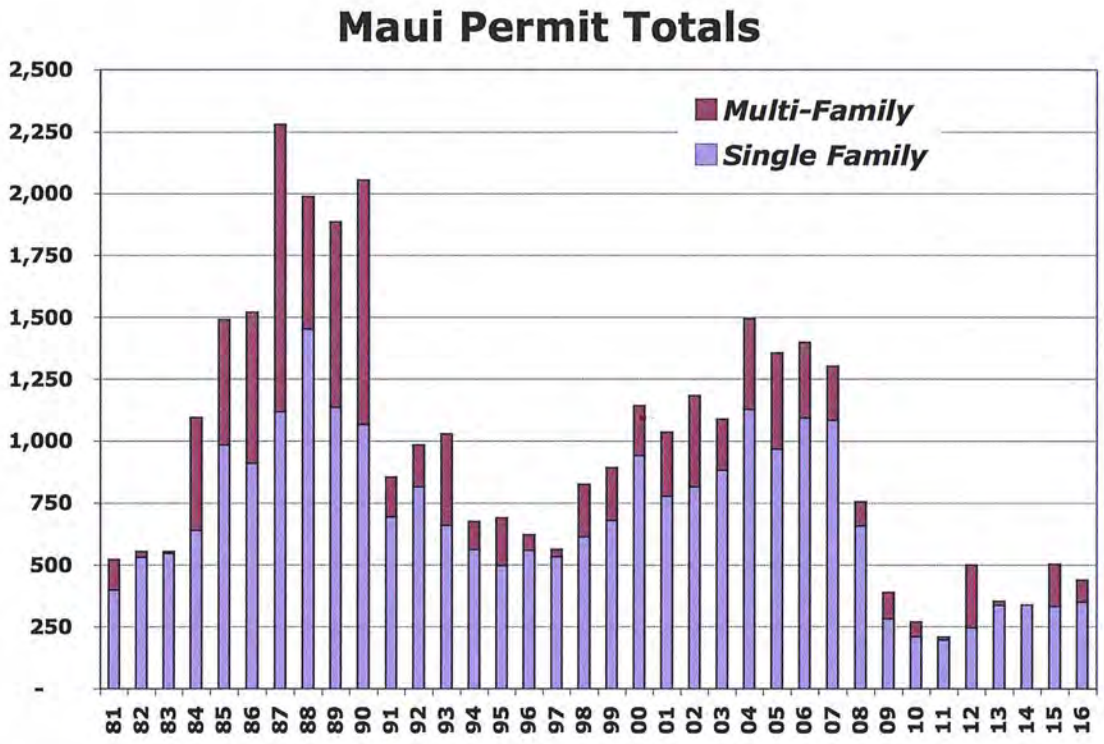
V. CURRENT AND FUTURE HOUSING SUPPLY

Permits

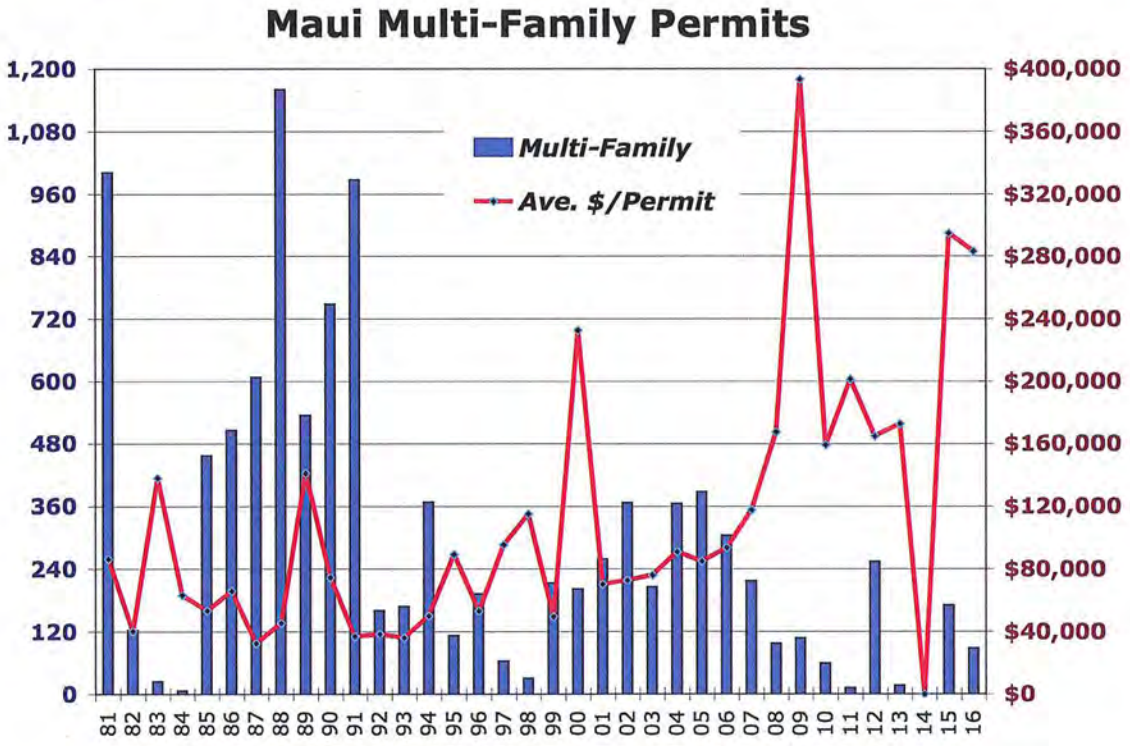
The easiest way to look ahead to where the housing market is going in the short-term is by examining the activity in permits (where developers apply for permission, and pay their fees, for building residential units). The number of building permits approved in a given year is an indicator of the demand for new housing units. To be sure, the count may be affected by a other considerations, such as home mortgage financing, current zoning situations, land use issues, infrastructure condition and financing, affordable housing requirements and other regulatory issues, project readiness, and other considerations that affect the scheduling of permit applications.

That said, a high level of activity indicates more supply, which means that more demand will be met, and the potential for prices adjusting downwards. Obviously, a low level of permits indicates less supply of housing (and potentially higher prices). In addition, low levels of per unit value indicate that the units being built are for the lower end of the market (and vice versa). And over time, this has not been the case overtime on Maui, indicating that most of the new housing has been targeted to the upper income end of the housing market.

A quick overview of the MAUI PERMITS Chart shows that permitted units has sunk so low that it set an all-time historical low three years ago for condo (multifamily) units.



Next, we look at just the multifamily segment. Per the Chart, the level of permits pulled this decade is woefully less than prior ones, indicating a potential shortfall in housing for the lower and med-level income households. This is substantiated by the average dollar value per condo – it spikes upwards on a regular basis, usually at the peak of economic growth, when there is optimism in the industry about the continuation of housing demand.



Planned Developments

The Master Planned Communities on Maui that are active include the following:

- Maui Lani consists of approximately 1,000 acres of land in the Central Maui plains that has approximately 950 units completed. Completed phases are the Greens, Grand Fairways North, Grand Fairways, The Island and The Bluffs. There's an upcoming Village project containing mixed-use product that will allow both residential (of approximately 650 units) and small-scale commercial uses. Some 2,000 units remain to be developed.

- Kehalani has approximately 550 acres of developable land area with numerous ongoing residential developments and approximately 1,000 dwelling units remaining within this project district.

The Master Planned Communities that are in their preliminary stages of development include:

- Pulelehua in West Maul (former Maui Land and Pineapple land) sits between the main highway and the Kapalua Airport on 310 acres of land. This plan has single family and multi-family residential units, totaling 882 residential units with approximately 50% being affordable targeting between 80-140 percent of the county's median income level. It was sold for $15 million in June 2015 to a Dallas company, USA Infrastructure Investments LP. They met with the community in November of 2015 and announced plans to do 130 workforce and 120 market-rate rental units.

- Wailea 670, or Honua'ula, received Maul Planning Commission approval to rezone the land from on agriculture to residential and commercial districts. The owners hope to be allowed to build some 1,400 single-family homes and multi-family units, 2.1 units per

acre. A golf course and approximately 80,000 square feet of retail space was contemplated, but plans have changed. The Council and Mayor approved their zoning through adoption of an Ordinance and not by the Maui Planning Commission. They agreed that their 250 affordable units would be located offsite, at Kaonoulu. Due to environmental concerns, however, it looks unlikely that there will be a golf course as a feature of this master plan. This throws into uncertainty the viability of the entire development.

- Kaanapali 2020 sits on some 4,300 acres in Kaanapali, and is planning for a mix of cluster housing, single-family residential, multifamily, commercial uses, schools, churches, medical, and a cultural center, golf course and transportation center. Developers have hoped to build some 2,800 housing units in the next 20 to 30 years.

- Waine'e abuts the eastern boundary of the Lahaina Aquatic Center & Recreation Center, with approximately 240 acres of land owned by the Kaanapali Development Corporation. They hope to build approximately 1,100 housing units with approximately half being affordable.

- Maalaea Mauka may build some 1,100 housing units mauka of the boat harbor. Potentially, it will have different products including affordable, market priced and luxury units.

- Waiehu Mauka Affordable Housing: 100 multi-family units housed in 20 buildings and six (6) single-family residential lots on an 8-acre parcel. The multi-family units will target households earning up to 120 percent of the area median income category.

- Kihei Mauka is a residential project in Kihei, Maui providing 600 new affordable and market-priced homes, a mixture of single-family and multi-family, with prices expected to range between $300,000 and $600,000. The first units will be multi-family, and affordable, and closed in 2018-2019. They sit next to Monsanto and downwind from Sugar Mill.

- Pu'unani will be a largely rural 550-unit subdivision with 310 house lots and 240 town homes. It abuts Kehalani, Wailuku Heights II and Waiolani Mauka. It is a development by Towne Island Homes, Steve Goodfellow of Maui and a partnership led by Lloyd Sodetani of Maui Realty Co. Inc. It is on 210 acres of prime but fallow Maui farmland.

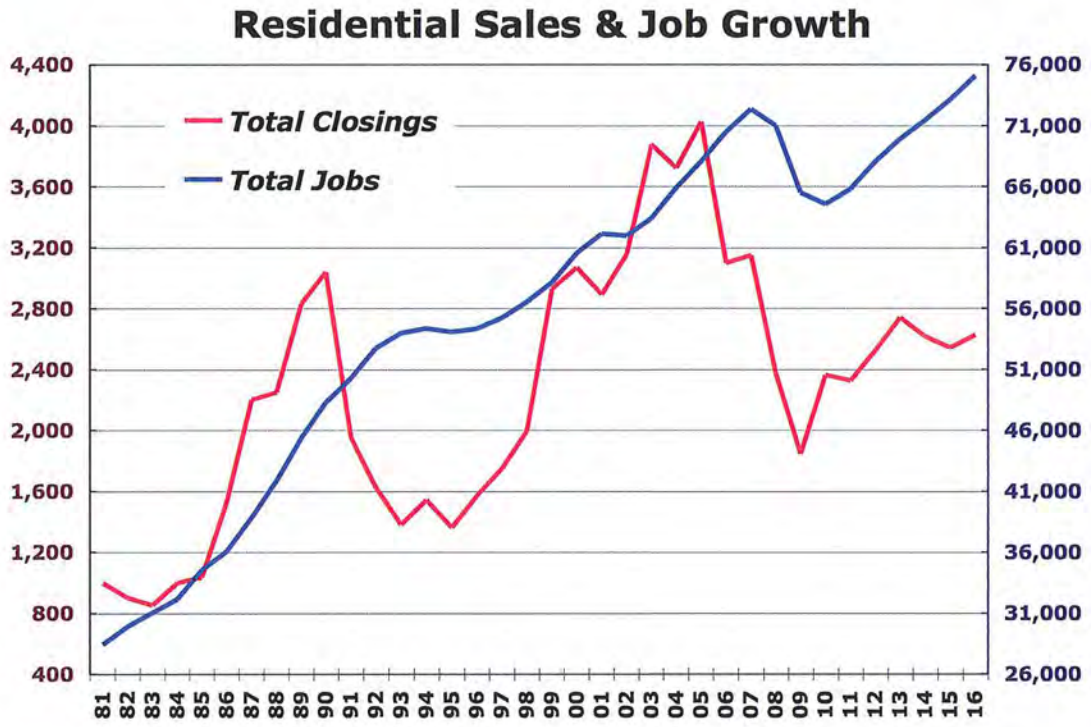
Turning from housing supply, we look at housing demand: past, current and future.

VI. OVERALL HOUSING DEMAND

The prime determinant of housing demand is household formation, itself is a function of the economy and demographic and social trends. As noted above, in the short term, residential housing demand is driven by economics – specifically of job creation/income growth, as well as interest rate trends. In the long term, housing demand is driven by population growth, demographic changes and lifestyle attitudes (indeed, faster population (growth means higher land and housing values).

Housing Demand, Driven by Job Growth

Second to none, housing demand is driven by the creation of jobs – jobs provide the incomes to buy homes, and they drive immigration, which is a prime source of housing demand (sometimes linked to population growth). This linkage is best illustrated in the SALES & JOB GROWTH Chart.



What is notable is how job creation was quite steady up until 2009, when the financial conflagration globally caught up with Maui. Since then, the market has stabilized somewhat, with few job losses in the ensuing two years.

What's also notable is that, in the short run, housing sales are a leading indicator for job creation: as can be seen in the early 1980s and the late 1990s. This year, it appears that while the trend is upwards, housing sales have softened, while jobs continue to grow. In the longer run, housing sales should turn back upwards, as new jobs create housing demand (new job holders are now able to afford to own a home).

In the tables below, we describe DBEDT's predictions for wage and salary job creation on Maui for the next 10-15 years, and derive from that a general expectation for housing demand over the next five to ten years (in other words, we will translate it into housing demand).

DBEDT'S 2035 JOB FORECAST FOR MAUI COUNTY, WAGE & SALARY JOBS

	2007	2015	2020	2025
Total civilian wage and salary jobs	76,730	81,810	86,670	91,390
5 Year Growth		5,080	4,860	4,720
Annual Job Growth		635	972	944
Annual Housing Demand (2 Jobs: 1 Home)		318	486	472

As seen, we use the annual changes in job counts to derive housing demand on the conservative premise that it will take 2 new jobs to generate demand for one new house (with the lower the salaries, the smaller or cheaper the house needs to be).

However, the job counts used in the charts and tables above are just the number of wage and salary jobholders, and do not encompass the self-employed or home worker. According to DBEDT's projections, self-employed workers consist of about 20% of the total work force, but are growing to 25% in the next ten to twenty years. The following transforms those projections into annual job growth projections, and then summarizes it in a complete DBEDT projection table.

DBEDT'S 2035 JOB FORECAST FOR MAUI COUNTY, SELF-EMPLOYED

	2007	2015	2020	2025
Total civilian wage and salary jobs	26,254	27,800	29,450	31,030
5 Year Growth		1,546	1,650	1,580
Annual Job Growth		193	330	316
Annual Housing Demand (2 Jobs: 1 Home)		97	165	158

Finally, the table below summarizes it in a complete DBEDT projection table.

DBEDT'S 2035 JOB FORECAST FOR MAUI COUNTY, TOTALED

	2007 to 2015	2015 to 2020	2020 to 2025
Annual Housing Demand (2 Jobs: 1 Home)	414	651	630

To be sure, most long-term projections are subject to error, but this one does not come close to what the average number of permits pulled has been on Maui (in the last 5 years, 337 permits, p.a., unadjusted for offshore demand) (when adjusted to off-shore demand, or 60% of condos taken out of the equation, then annual permitting has been 270 units, p.a.).

Housing Demand, Driven by Population Growth

This section looks at the level and the sources of long-term housing demand, given expected population changes, and analyzes how this would fit with the proposed projects' development plan.

HOUSING DEMAND SINCE 2000: The following tables show population growth per annum, starting in 2000 and ending in 2015, the last year we have population data for. This time frame roughly encompasses an entire real estate cycle, as 2000 was a few years into the upswing of the 1998-2006 market, just as 2015 is a few years past the bottom of this market, 2010-2011.

Note that in the table, the population change per annum is changed into a household one – a change per annum. This is done by factoring it by the average number of people in a household, as determined by the US Census. This becomes the number of new households in the market, which then equates to an annual creation of housing need.

Next, the annual housing need is compared to the annual number of homes available to them – meaning the number of new homes that were produced that year. In that year, if there were more homes produced than households were formed (an assumption), then there would be a surplus of supply (homes) over demand (population growth) for the year, and vice versa.

A note here: the annual number of homes produced are the actual new homes created, as drawn from and defined in the tax assessor's data base as 'Year Built.'

However, not all those new homes created in any one year are available to the general public. This is reference to the housing production that is absorbed by offshore buyers as second homes. While this is an insignificant amount in almost all national markets, it is a significant one in Hawaii. And it is particularly significant on Maui, which has a large and very highly rated visitor industry. In fact, about 80% of the attached housing and about 20% of the detached dwellings on Maui are non owner-occupied.

Thus, the total housing produced in any one year will not be available to them, particularly those at the lower income levels. As seen in this report, a preponderance of new homes are produced for households making a higher income, as they are a more profitable and less risky market segment for developers.

To account for this, our total annual housing production number is reduced by a factor that reflects that a portion of these new homes are not available to local families. This factor relates to data above owner-occupied (i.e., whether they were sold to households that occupy the dwelling unit, or to those who do not, meaning second home owners and investors). When the entire stock of housing of condominiums and single-family homes in the county was considered, 20% of condominiums and 68% of single-family homes were owner-occupants.

Given that, we assumed that this factor should be set at a level that was half the stated percentage for non-owners, second home owners. This was because some of these non-owner occupied units would turn out to be rented out by their owner-investors, and thus they would be available as rental units. We deemed this to be conservative, as it is our experience that most newly created housing is not absorbed by investors, save at the higher price ranges.

In sum, the annual housing production was factored down, then compared to households created. the difference was calculated, showing housing need surplus or deficit, and then calculated cumulatively.

MAUI HOUSING GROWTH TO HOUSING DEMAND, 2000 to 2015

	Population	Annual Change	Persons Per Household	Households Created	Housing Production	Need vs. Production	Cumulative Need
2000	129,078		2.91		591		
2001	132,428	3,350	2.90	1,155	772	(383)	(383)
2002	134,583	2,155	2.89	744	540	(204)	(587)
2003	137,596	3,013	2.89	1,043	735	(308)	(895)
2004	140,625	3,029	2.88	1,051	719	(332)	(1,227)
2005	143,448	2,823	2.87	984	1,001	17	(1,210)
2006	145,776	2,328	2.86	815	551	(264)	(1,474)
2007	148,117	2,341	2.85	823	600	(222)	(1,696)
2008	151,424	3,307	2.83	1,167	442	(725)	(2,421)
2009	153,393	1,969	2.82	698	214	(484)	(2,905)
2010	155,052	1,659	2.82	588	228	(360)	(3,265)
2011	156,651	1,599	2.82	567	113	(454)	(3,718)
2012	158,510	1,709	2.82	606	221	(385)	(4,104)
2013	160,947	2,437	2.82	863	280	(583)	(4,687)
2014	163,398	2,451	2.82	868	231	(637)	(5,324)
2015	164,637	1,239	2.82	439	137	(302)	(5,626)

Under these assumptions, the model indicates that every year in this time period, save for one, there was greater household growth than housing production, or an imbalance. An annual imbalance of this sort affects the housing market by favoring or stimulating higher prices (and thus higher rental rates). Further, this imbalance, or unmet housing need, when carried forward to the next year, increases pressure on prices and rents upwards. As seen, the potential for unmeet housing need, just over the last 15 years, is 5,626 units.

HOUSING DEMAND, 2015 TO 2020

Next, we look into the future. The tables below describe DBEDT's predictions for population for the county, and derive from that a general expectation for housing demand over the next five years (in other words, we will translate it into housing demand). Note that the model* used here is the seventh in a series of long-range projections dating back to the first report published in 1978.

Like the data used to determine the number of households by income and age in the rental housing demand study, this one uses the detailed population characteristics from the 2010 Decennial Census. This DBEDT study also uses the 2010 estimates of economic variables, and input-output (I-O) tables based on the 2007 Economic Census as baseline data for the projection.

The writers of this study note that: "these projections are neither targets nor goals. They are DBEDT's best estimates of likely trends in important population and economic variables based on currently available information. The accuracy of these projections depends on the degree to which historical trends provide guides to the future, changing external conditions, infrastructure capacity, and other supply constraints which have not been incorporated into the model.

Thus, the further this projection of the census and economic data goes out into the future, it is more susceptible to inaccuracies, relative to what finally transpires. That said, it is useful for setting expectations and planning for those contingencies.

Our analysis of this market begins with the population growth 2010-2020, using data from the US Census. Again, we took the change in the population, and then used that to derive housing demand. In this, we averaged the size of household over this ten-year time period, which came out to 2.82 people per household on average.

HOUSING NEED, PER DBEDT 2040 POPULATION PROJECTIONS

	2000	2010	2020
Resident population	129,078	155,214	181,000
Pop Growth		26,136	25,786
Household size (US Census)	2.87	2.91	2.82
Housing Need		8,981	9,131
Housing Need, p.a.		898	913

We again compared future household growth to past housing production, the growth of housing supply, over the 2000-2010 period. This measure of total homes supplied (from the table above) was 5,698 units, or 570 units per annum. Thus, comparing the future household growth of 9,131 dwellings to past housing production available to owner occupants, this exercise shows a deficit of 243 dwelling units, on an annual basis: 570-913=(243), shortage of homes relative to housing need.

Accounting for past and future, this model thus shows that more than 9,100 dwelling units will be needed in the county to accommodate future projected household housing need. Additional to this future need, there remains the past need of the 5,626 dwellings that accumulated as unmet potential housing need from 2000.

VII. HOUSEHOLD HOUSING DEMAND BY INCOME, AGE & UNIT SIZE

OVERVIEW: This section looks at the actual demand for housing, based on incomes, family size and head of household age. It does this for the entire island including Lahaina, which has a large population.

HOUSEHOLD INCOME, SIZE AND AGE

The following demographic data on household incomes, household sizes and household head ages comes from Ribbon Demographics, a firm that specializes in taking the 2010 US Census data and representing it in ways that are meaningful to those seeking to understand the demographic demand for housing.

The table below takes the total population of households in the county that are renting, and it into income brackets and household size (by the number of people in the household)

ALL HOUSEHOLDS, COUNTS BY INCOME AND HOUSEHOLD SIZE, 2016

Incomes	1-Person	2-Person	3-Person	4-Person	5+-Person	Total
$0-10,000	1,199	613	241	196	157	2,406
$10,000-20,000	1,935	1,020	442	146	148	3,691
$20,000-30,000	1,852	1,441	462	327	454	4,536
$30,000-40,000	2,061	1,435	662	605	399	5,162
$40,000-50,000	1,177	1,210	740	536	380	4,043
$50,000-60,000	1,041	945	612	541	346	3,485
$60,000-75,000	1,172	2,098	783	685	510	5,248
$75,000-100,000	1,171	2,868	1,488	1,085	1,192	7,804
$100,000-125,000	662	1,816	1,124	1,082	1,129	5,813
$125,000-150,000	378	1,417	597	544	819	3,755
$150,000-200,000	323	905	931	498	1,210	3,867
$200,000+	587	1,301	792	471	1,169	4,320
TOTALS	**13,558**	**17,069**	**8,874**	**6,716**	**7,913**	**54,130**

Then, the income limits per household, according to the HUD 2016 AMI definition, is shown below.

MULTIFAMILY TAX SUBSIDY PROJECT INCOME LIMITS, 2016

AMI	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person
20%	$11,280	$12,880	$14,500	$16,100	$17,400	$18,680	$19,980
30%	$16,920	$19,320	$21,750	$24,150	$26,100	$28,020	$29,970
50%	$28,200	$32,200	$36,250	$40,250	$43,500	$46,700	$49,950
60%	$33,840	$38,640	$43,500	$48,300	$52,200	$56,040	$59,940
80%	$45,120	$51,520	$58,000	$64,400	$69,600	$74,720	$79,920
100%	$56,400	$64,400	$72,500	$80,500	$87,000	$93,400	$99,900
120%	$67,680	$77,280	$87,000	$96,600	$104,400	$112,080	$119,880
140%	$78,960	$90,160	$101,500	$112,700	$121,800	$130,760	$139,860

The following table then takes the data and reformats it, using the income limit guidelines of HUD for 2016, starting at 30% and running up to 140% AMI. Note that this data is for renters only.

RENTER ONLY HOUSEHOLDS BY AMI AND SIZE, 2016

AMI	1-Person	2-Person	3-Person	4-Person	5-Person	6-Person	7+-Prsn	Total
30%	1,846	856	488	341	198	121	155	4,004
40%	1,537	1,201	534	378	215	118	157	4,140
50%	490	397	342	197	111	57	67	1,662
60%	1,119	847	537	586	122	115	77	3,403
80%	695	795	380	383	195	103	122	2,675
100%	348	915	426	319	165	86	83	2,342
140%	348	706	358	149	141	42	21	1,764

Next, we looked at this data by owner households only.

OWNER ONLY HOUSEHOLDS BY AMI AND SIZE, 2016

AMI	1-Person	2-Person	3-Person	4-Person	5-Person	6-Person	7+ Persn	Totals
30%	1,041	913	298	218	130	73	94	2,767
40%	728	870	402	471	139	79	110	2,799
50%	360	518	256	279	63	36	47	1,558
60%	917	813	524	298	72	48	59	2,731
80%	666	1,042	439	398	204	142	176	3,066
100%	320	934	523	488	268	160	173	2,866
140%	317	1,118	463	700	295	116	153	3,161

The comparison between the owner and the renter households shows that the renter demographic is skewed toward the lower AMI segments. Thereafter, the skew is in favor of the owner households

The following table combines both renter and owner data.

RENTER & OWNER HOUSEHOLDS BY AMI AND SIZE, 2016

AMI	1-Person	2-Person	3-Person	4-Person	5-Person	6-Person	7+ Persn	Totals
30%	2,887	1,768	786	558	328	194	249	6,771
40%	2,265	2,071	936	849	354	197	267	6,939
50%	849	914	598	476	175	93	115	3,220
60%	2,036	1,660	1,061	884	194	163	135	6,134
80%	1,361	1,837	820	781	399	245	298	5,740
100%	668	1,849	950	807	433	246	256	5,208
140%	664	1,824	820	849	436	158	174	4,926

The table shows that there are significant 'bulges' in the income demography at the 30%, 40% and 60% of AMI, relative to the other segments. And, within those segments, the 1-person households are the largest component, followed by the 2-person segment.

Next, we looked at the data not by individual renter segments, but in a cumulative, summary, vantage point (by accumulating the total number of households at or below a particular AMI level).

CUMULATIVE DATA FOR RENTER ONLY HOUSEHOLDS BY AMI AND SIZE, 2016

AMI	1-Persn	2-Persn	3-Persn	4-Persn	5-Persn	6-Persn	7+ Persn	Totals
30% & below	1,846	856	488	341	198	121	155	4,004
50% & below	3,383	2,056	1,022	719	413	239	312	8,144
60% & below	3,873	2,453	1,364	915	524	295	380	9,805
80% & below	4,992	3,300	1,901	1,502	646	410	456	13,208
100% & below	5,687	4,095	2,282	1,885	841	514	578	15,883
120% & below	6,035	5,011	2,708	2,204	1,006	600	661	18,225
140% & below	6,383	5,717	3,066	2,352	1,148	642	682	19,989

Next, we looked at the data not by individual segments, but in a cumulative, summary, vantage point (by accumulating the total number of households at or below a particular AMI level).

CUMULATIVE COUNTS & SHARE OF HOUSEHOLDS, RENTERS & OWNERS, 2016

AMI.	Renter Total	Owner Total	Renter & Owner	% Renter Total Population	% Owner Total Population	%, Renter & Owner
30%	4,004	2,894	6,898	7%	5%	12%
50%	8,144	5,935	14,079	14%	10%	24%
60%	9,805	7,743	17,549	17%	13%	30%
80%	13,208	10,826	24,034	23%	18%	41%
100%	15,883	14,161	30,044	27%	24%	51%
120%	18,225	16,989	35,213	31%	29%	60%
140%	19,989	20,011	40,000	34%	34%	68%

This shows there are some 9,805 renter only households living at or below the 60% of median income, or 17% of the total population on the island. If the threshold is raised to 80% AMI, then this ratio becomes 22.6%. Note that these numbers, through the 140% of AMI, encompass the most of the households on Maui (40,000 out of 58,643 households).

Next, we broke just the renter data by AMI down into three age groupings: one for families, defined as households whose head of house was between the ages of 25 and 54 years, and two for senior households, the first defined as households whose head was aged 55 years and older, and the second defined by a head of household aged 65 years and older.

RENTER HOUSEHOLDS AGED 25-54 YEARS BY AMI AND SIZE, 2016

AMI	1-Persn	2-Persn	3-Persn	4-Persn	5-Persn	6-Persn	7+ Prsn	Totals
30%	710	491	428	269	171	105	135	2,310
50%	694	923	438	312	191	104	139	2,801
60%	276	212	290	163	100	51	61	1,153
80%	660	534	439	511	109	101	69	2,422
100%	381	486	307	276	177	96	114	1,837
120%	194	586	288	165	147	72	65	1,517
140%	194	449	237	98	111	33	16	1,140

Note that the data in these next two charts overlap: the table for the 55+ Years Old data includes those that are 65+ years old (but not vice versa).

SENIOR RENTER HOUSEHOLDS AGED 55+ YEARS, BY AMI AND SIZE, 2016

AMI	1-Persn	2-Persn	3-Persn	4-Persn	5-Persn	6-Persn	7+ Prsn	Totals
30%	1,136	365	60	71	27	16	20	1,694
50%	843	278	96	66	25	13	18	1,339
60%	214	185	53	34	11	6	7	509
80%	459	313	98	76	13	14	8	981
100%	314	309	74	107	17	7	8	838
120%	154	329	138	154	18	14	18	825
140%	153	257	120	50	30	9	5	625

As seen, the elderly need is greater than the family one in the one-person household making under than 30% and 50%. As the households get larger, the elderly need gets smaller in absolute numbers.

ANALYSIS BY HOUSING UNIT COUNTS: The following tables take the potential demand for housing units in relation to the number of people in the households that are currently renting, as was described in the section above, the data was used to translate it into a particular housing unit type that suits those sizes, (sizes that relate to bedroom counts).

The translation here assumes that the Imputed Persons Per Bedroom* is in accordance with the project using financing under IRS Section 142 Tax-Exempt Bond in the Honolulu MSA for a project. The alternative is to use financing via the IRS Section 42 Low-Income Housing Tax Credit (LIHTC). The interesting point is that the LIHTC assumption has more people living in the larger bedroom count units and less in the smaller bedroom count units. For our purposes, we rely on the other assumption, the one for the Tax-Exempt Bond.

** While affordable rental housing markets do vary across the nation, and HUD assumptions sometimes wander far a field from reality, the Hawaii affordable rental housing market area is one of the most housing constrained in the nation, if not the absolute worst. A reasonable assumption would that the imputed number is probably slightly lower than the actual usage. Our assumption here is that the imputed number is probably much lower than the actual usage, meaning the actual usage far exceeds the imputed number (meaning a significant degree of overcrowding).*

The table below describes the differences:

IMPUTTED FAMILY SIZE PER UNIT BEDROOM TYPE

	Tax-Exempt Bond	LIHTC Credit
Efficiency/Studio	1 Person	1 Person
1 Bedroom	2 People	1.5 People
2 Bedroom	3 People	3 People
3 Bedroom	4 People	4.5 People
4 Bedroom	5 People	6 People
5 Bedroom	6 people	5 People

For simplicity's sake, we use the Imputed Persons Per Bedroom factor to derive the specific housing type that is needed. So a one-person household will demand a studio. And a two person household will demand a one bedroom unit, we have highlighted the highest need in yellow and the second highest need in green per the bedroom type.

POTENTIAL HOUSING DEMAND, HOUSEHOLDS AGED 25-54 YEARS BY AMI

AMI	Studio (1.0)	1 Bed (2.0)	2 Beds (3.0)	3 Beds (4.0)	4 Beds (5.0)
30%	710	491	428	269	171
50%	694	923	438	312	191
60%	276	212	290	163	100
80%	660	534	439	511	109
100%	381	486	307	276	177
120%	194	586	288	165	147
140%	194	449	237	98	111

POTENTIAL-HOUSING DEMAND, HOUSEHOLDS AGED 55+ YEARS, BY AMI

AMI	Studio (1.0)	1 Bed (2.0)	2 Beds (3.0)	3 Beds (4.0)	4 Beds (5.0)
30%	1,136	365	60	71	27
50%	843	278	96	66	25
60%	214	185	53	34	11
80%	459	313	98	76	13
100%	314	309	74	107	17
120%	154	329	138	154	18
140%	153	257	120	50	30

However, since the project will not address any of the demand below 80% AMI, this table only shows the potential need for households at 80% AMI to 140% of AMI and higher.

POTENTIAL HOUSING DEMAND, HOUSEHOLDS AGED 25-54 YEARS BY AMI

AMI	Studio (1 ppl)	1 Bed (2 ppl)	2 Beds (3 ppl)	3 Beds (4 ppl)
80%	660	534	439	511
100%	381	486	307	276
120%	194	586	288	165
140%	194	449	237	98

The following table compares the potential demand with the proposed unit count and mix, for the previous unit mix.

UNIT MIX VS POTENTIAL HOUSING DEMAND, HOUSEHOLDS AGED 25-54 YEARS BY AMI

Bed	AMI	Units	Potential Demand	Market Share
1	80%	60	534	11%
1	100%	50	486	10%
2	120%	71	288	18%
1	Market	20	916+	NA
3	Market	80	1,146+	NA
3	Market	20	720+	NA

Note that the potential demand for the affordable units was derived under the methodology described above, specifically local Maui demand by level of income and the number of people in the household (family size).

On the other hand, the market rate units describe the potential demand at a much higher level. This is because that demand can come from a renter household making $80,000 and up for a one bedroom, which encompasses many more households (on up to $200,000 and higher). We have noted this with a "+" added after the demand number, which reflects the addition of these higher income households.

Note, if consideration was given to producing 3 bedroom units for the affordable renter segment, the demand would be 98 households at the 140% level. However, our experience is that there are very few projects with 3 bedroom units targeting the affordable renter because building costs are prohibitive, and market rents are so much more remunerative.

Note that although the unit mix has changed to accommodate the allowance for market-rate units in the project, we repeat the table and considerations, as it validates the project WITHOUT this new (and beneficial) change.

The new table is below, makes the assumption that 40% of the units will be at market rates and eliminates the requirement to restrict these remaining units at 140% of AMI.

UNIT MIX VS POTENTIAL DEMAND, AFFORDABLE HOUSEHOLDS AGED 25-54 YEARS

Bed	AMI	Units	Potential Demand	Market Share
1	80%	60	534	11%
1	100%	50	486	10%
2	120%	71	288	18%

The market rate units are not dependent on local households as potential renters. Indeed, it opens up these market units to offshore demand in a significant way – significant in terms of higher potential demand and higher rental revenue. As mentioned earlier, the ability to have a 3-month lease period is important, as that can take advantage of seasonal demand – meaning the winter and the summer 'high' periods.

As the market rate units have a wider audience, further thought should be given to market-rate conditions. Thus, we turn to look at rental market conditions.

VIII. THE COUNTY'S RENTAL MARKET

OVERVIEW: Multi-family living has been an important part of the county's housing market since the late 1960's. With developable land limited and construction costs expensive, multi-family units have been the most efficient way to provide affordable housing, both in terms of owning and renting, for a significant percentage of the island's residents.

That said, multi-family housing was also attractive to visitors from outside the island, primarily as a way to lower the cost of their vacation. Further, it also became an opportunity to own a second home and/or to invest in a rental property.

Over the latter part of the 1990's, the county enjoyed strong growth in the demand for these vacation rentals, thanks to the high quality of life in the state and the attractiveness of lifestyle on the island. Indeed, there are a large numbers of rental units targeting visitors only.

This investor market grew to be the predominant one on Maui today. It is characterized by high rental rates. This is why many of the island's multifamily unit owners cater to this demand both individual owners of rental units, as well as corporate or institutional owners of rental projects.

Because of this, there are two rental markets on Maui, the high-end and the low-end, with little or nothing in between. Indeed, much of the mid-range rental housing demand has found a source in single-family rentals, either whole unit, half-unit, ohana (meaning family but connoting a 'granny' unit, or a backyard cottage. The problem is, and has been, a mismatch between housing costs and household incomes. This has been going on for generations, and has just gotten worse.

High-priced housing markets like Maui's often have high ratios of shelter cost to household income – and those whose shelter-to-income (STI) ratios greater than 30 percent are income challenged, or cost burdened. In 2011, about 51 percent of local residents were paying less than 30 percent of their monthly income for shelter. At that level, households can use 70 percent of their income for necessities and are more likely to qualify for mortgage loans. In 2016, the proportion paying less than 30 percent of household income for shelter (rent or mortgage plus utilities) was up to 58 percent.

As mentioned earlier, in 2016, Hawaii ranked #1 in the nation for having the widest gap between wages and the price of rental housing by The National Low Income Housing Coalition's annual report, Out of Reach. It showed that in 2016, the national Housing Wage is $20.30 for a two-bedroom rental unit, assuming a 40-hour workweek, 52 weeks per year. In comparison, Hawaii's Housing Wage is $32.44 for a two-bedroom rental unit.

In 2016, the fair market rent for a two-bedroom apartment in Hawaii was $1,780. In order to afford this level of rent and utilities—without paying more than 30% of income on housing—a household must earn $5,932 monthly or $71,184 annually. A worker earning the federal minimum wage of $7.25 per hour would not be able to afford a two-bedroom apartment at HUD's fair market rent even if he worked 24 hours a day, 7 days a week.

HOUSEHOLD CONDITIONS, SIZE AND OWNERSHIP: A major effect of high housing costs on families is that they re-rent part of their shelter to friends or families. Evidence of this is measured by the US Census, and they define crowding as 2 or more persons per bedroom.

They also measure doubling up via surveys and define that as 'more than one family group' in a household. . In the last Housing Planning Study, such a survey was performed and the results from Maui show that for owners, 4.5% of the respondents characterized their living situation as

'crowded' and another 14.7% indicated 'doubling up' in the household. For renter respondents, 18.4% of them indicated 'crowding' and another 13.5% said yes to 'doubling up."

CROWDING & DOUBLING UP, ALL MAUI HOUSEHOLDS SURVEYED

	Owners	Renter
Crowded	4.50%	18.40%
Doubled up	14.70%	13.50%
Crowded & Doubled Up	18.00%	26.60%

The following tables show the data by area, with West Maui showing the worst conditions.

MAUI HOUSEHOLDS DOUBLING UP, BY AREA

	Upcountry	Central Maui	North Shore	South Maui	West Maui
Yes	12.20%	13.70%	13.50%	16.30%	16.50%
No	87.80%	86.30%	86.50%	83.70%	83.50%

MAUI HOUSEHOLDS CROWDING, BY AREA

Ppl/Bedroom	Upcountry	Central Maui	North Shore	South Maui	West Maui
Less than 2	92.30%	88.80%	94.90%	91.10%	85.70%
More than 2	7.70%	11.20%	5.10%	8.90%	14.30%

MAUI HOUSEHOLDS DOUBLING UP & CROWDING, BY AREA

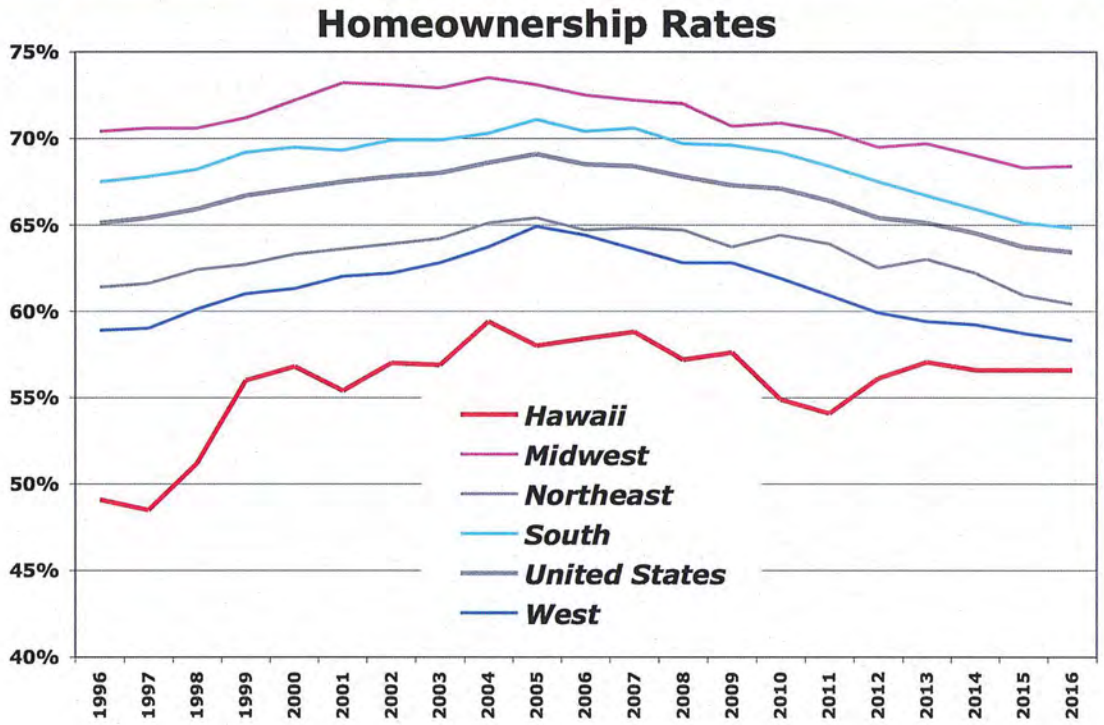
	Upcountry	Central Maui	North Shore	South Maui	West Maui
Either or Both	18.70%	22.70%	17.40%	22.00%	25.50%
Neither	81.30%	77.30%	82.60%	78.00%	74.50%

Another way that this condition is made apparent is the measurement of household size. Indeed, as households cannot afford housing, then overtime pent-up demand increases, household formation is delayed and the average household size grows. The statewide average for household size increased by 2.8% from 2.88 persons per household to 3.11. This is consistent with a housing market where demand was greater than supply. The following table shows that Maui County had second highest increase in average household size over the 10-year period.

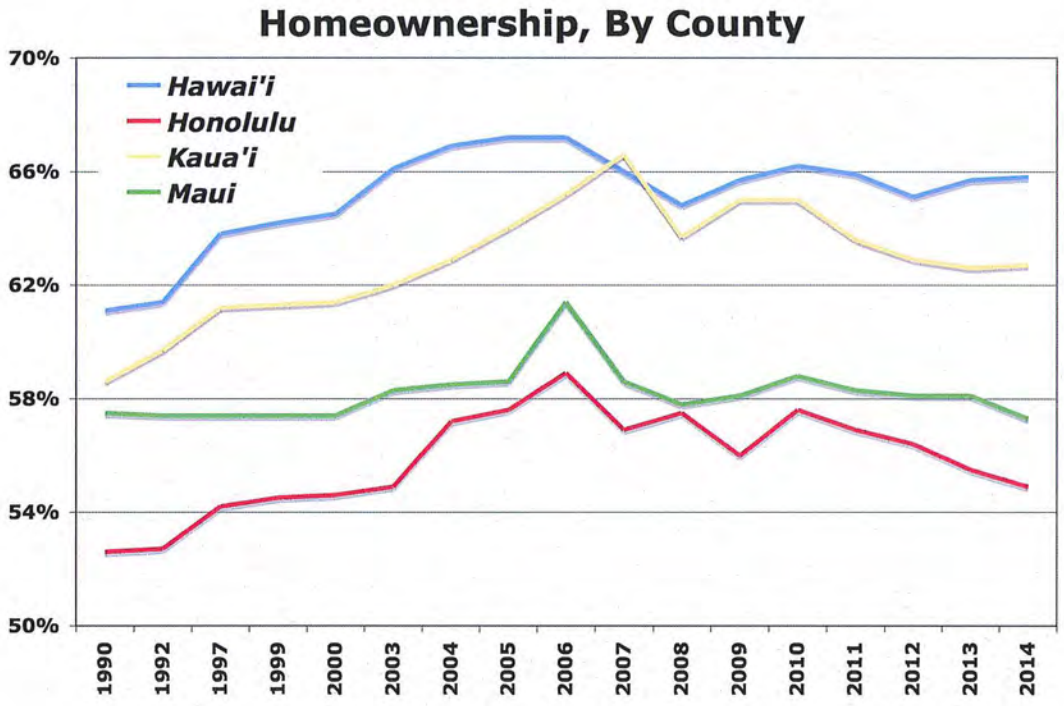
MAUI HOUSEHOLDS DOUBLING UP & CROWDING, BY AREA

	Population Growth	Household Growth	Housing Size Growth
Hawaii	19.1%	17.0%	0.3%
Honolulu	10.9%	3.5%	8.8%
Kauai	14.3%	11.7%	2.3%
Maui	19.3%	12.5%	5.8%

Another manifestation of high-priced housing is low ownership. The following charts illustrate.

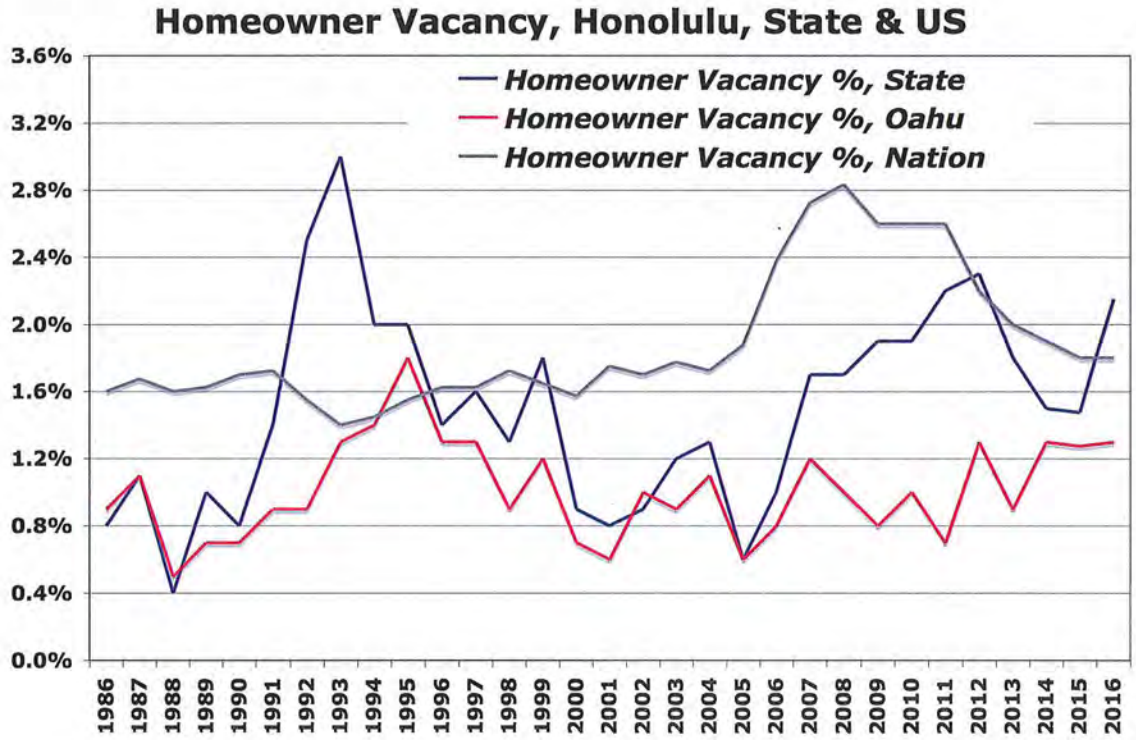


Maui County shows a low rate of homeownership, relative to the rest of the nation, and relative to the state.



Hawaii also had the one of the lowest homeowner vacancy rates, and renter vacancy rates.

Besides, low homeownership, the US Census calculates the rental vacancy rates. That data is illustrated in the chart below.



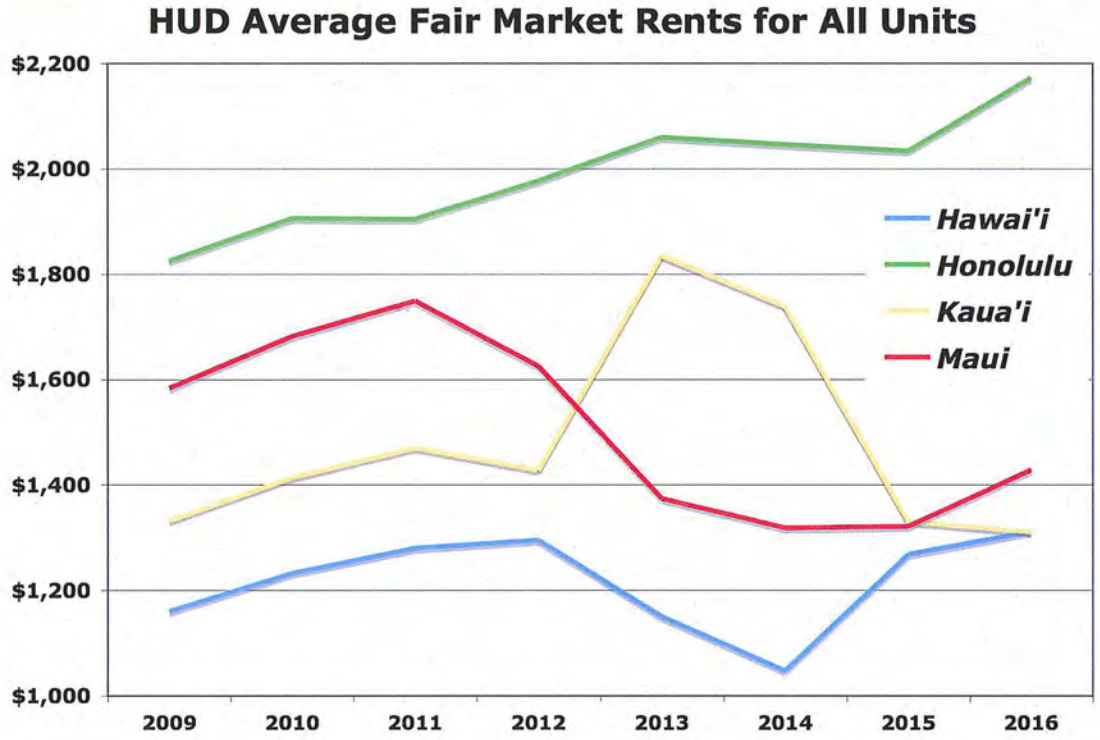
Note that the Hawaii Census data does not break down by Counties so data for Maui County is not available. What's shown in the graph below shows a statewide vacancy rate that at first glance seems rather high but it includes units that have seasonal availability. The skewed data is also driven by temporary vacation rentals throughout the islands and condominium conversions whereby investors put out short-term rentals. This outside tourism demand increases documented vacancy rates. It is difficult to extrapolate specifically for Maui County.

All of this speaks to the desirability of living in a dwelling in Hawaii, and – by extension – the difficulty of finding affordable housing, rental or otherwise for local households, particularly those making 100% and below the median income for the area.

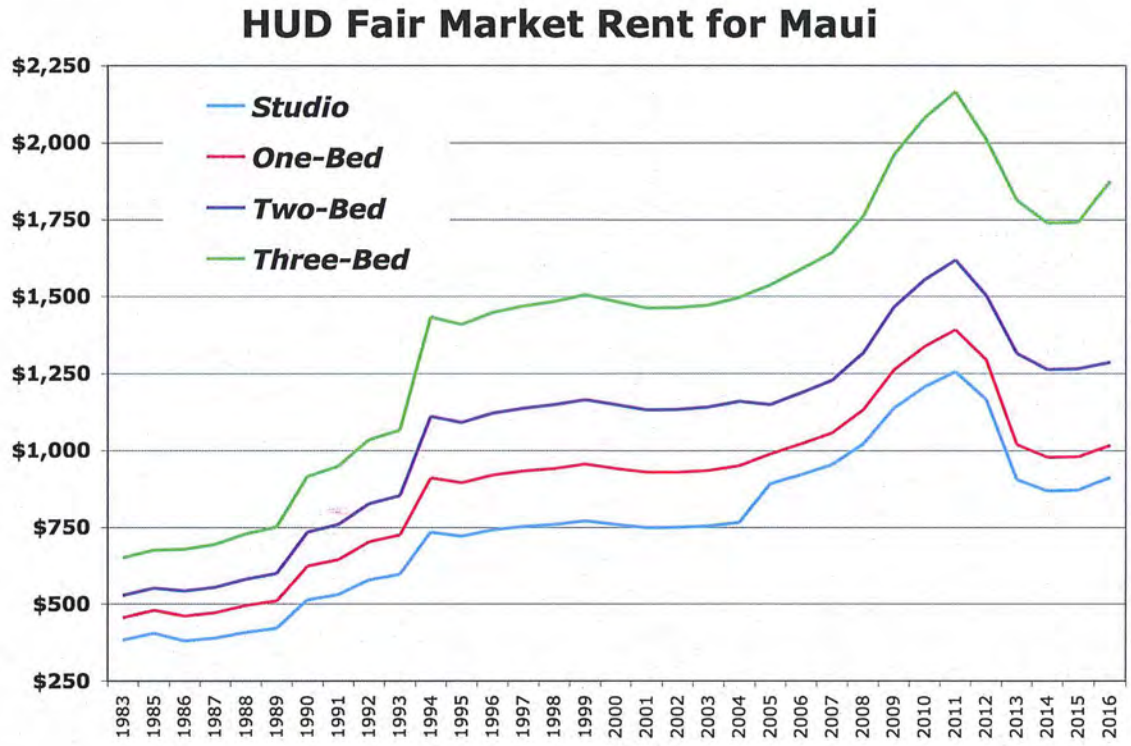
Turning to an examination of the actual rental rates being charged in the market (other than the rental market survey, in the next section), there are a few government resources to draw upon.

The best known one is called "Fair Market Rents" (FMR) and comes from the US Housing and Urban Development department, HUD. Every year, HUD analyzes the rental markets across the country annually, and then publishes a set of gross rent estimates for an area. They include the shelter rent plus the cost of all tenant-paid utilities, minus conveniences, like telephone and Internet.

HUD does so by using (to quote them) "the most accurate and current data available" – per (http://www.huduser.org/datasets/fmr.html) - and this data includes the 2010 US Census data, the last American Community Survey (ACS) data, and telephone surveys of eligible recent rental unit movers.



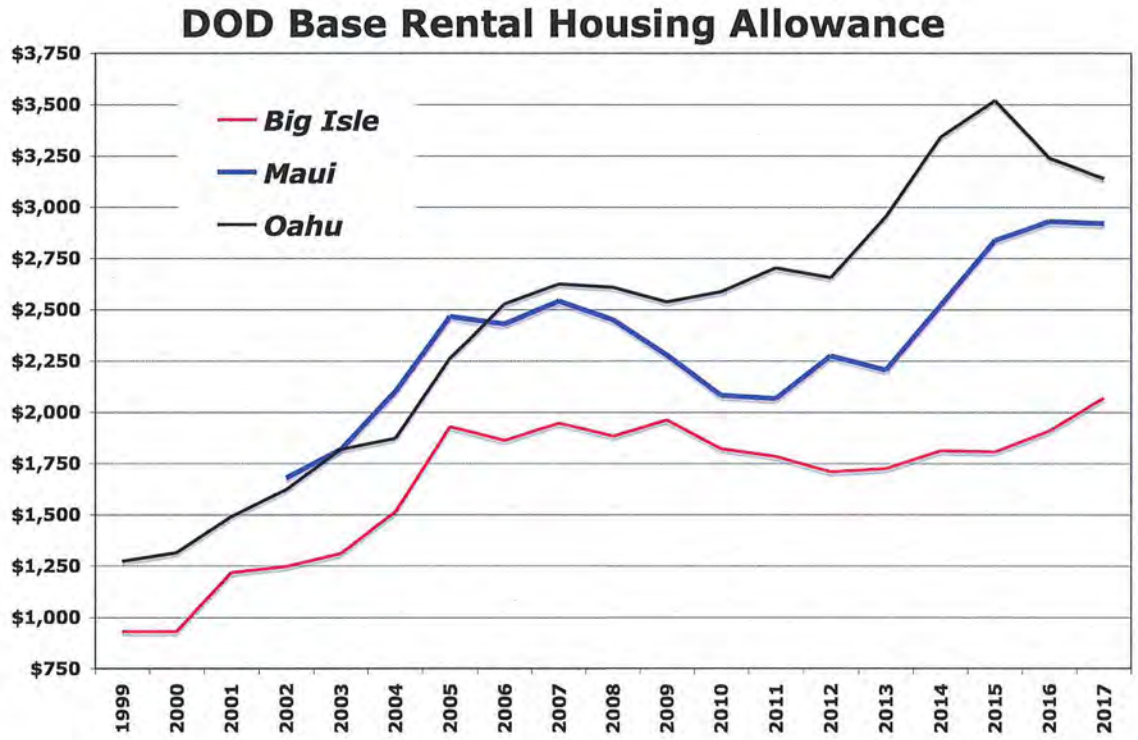
As seen, the HUD defined rents for the county declined in 2011, accelerated the following year, before declining dramatically again. This appears to be an anomaly, as these years saw the economy and the residential real estate cycle reviving, both for prices and closings in the for-sale market. Generally, the for-sale and the rental markets trend closely, one tracking the other.



One possible explanation for this here, and repeating later, that two of these data sources – ACS and Census - are static, done every few years. The other one is that their methodology is not very accurate: telephone surveys of people moving in and out of units done randomly, are not very reliable, especially in non-urban areas, non-English speaking areas, and areas where there is a high turnover in rental units, such as vacation destinations. As such, the trends of the FMR do not match up with those rental trends from other sources, as seen.

Another source of rental trend information comes from the Department of Defense. It is called the BAH, or Base Allowance for Housing, and it is their description of the rental market rates, done in conjunction with providing their personal based in the county with a rental allowance, This is done for all counties where military personnel are based, and adjusted for a cost of living.

The following chart shows the average allowance that the military provides to its households when stationed in an area, in this case, Maui and the other counties. As seen, the allowance for Maui has risen from about $1,750 to $2,500, a hefty rise of over 40% – contrary to the Fair Market Rent trend for the same period (which is curious, looking at the spike up and down the last 3 years).



As seen, these two government agencies have differing views on the trend and the level of rental rates in Maui County.

Given that, rental housing research and researchers have used publicly available data on rental rates to describe the market place. Historically, the best source, in terms of depth, breadth and consistency, was classified advertising in the local newspapers. The listings here provided a wealth of important data, such as asking rents, unit size, unit location, unit features, unit restrictions, etc., This data, when collected overtime, then allowed a research to show rental rate and unit availability trends, and do so by location, bedroom count, rents and other features.

However, the advent of the internet disrupted the classified advertising marketplace by allowing that activity – and information - to migrate from a hard copy print in a newspaper into an electronic data held within a website. Thus, the research done using newspaper classified waned while that done using Internet websites that specialize in rental units in the area.

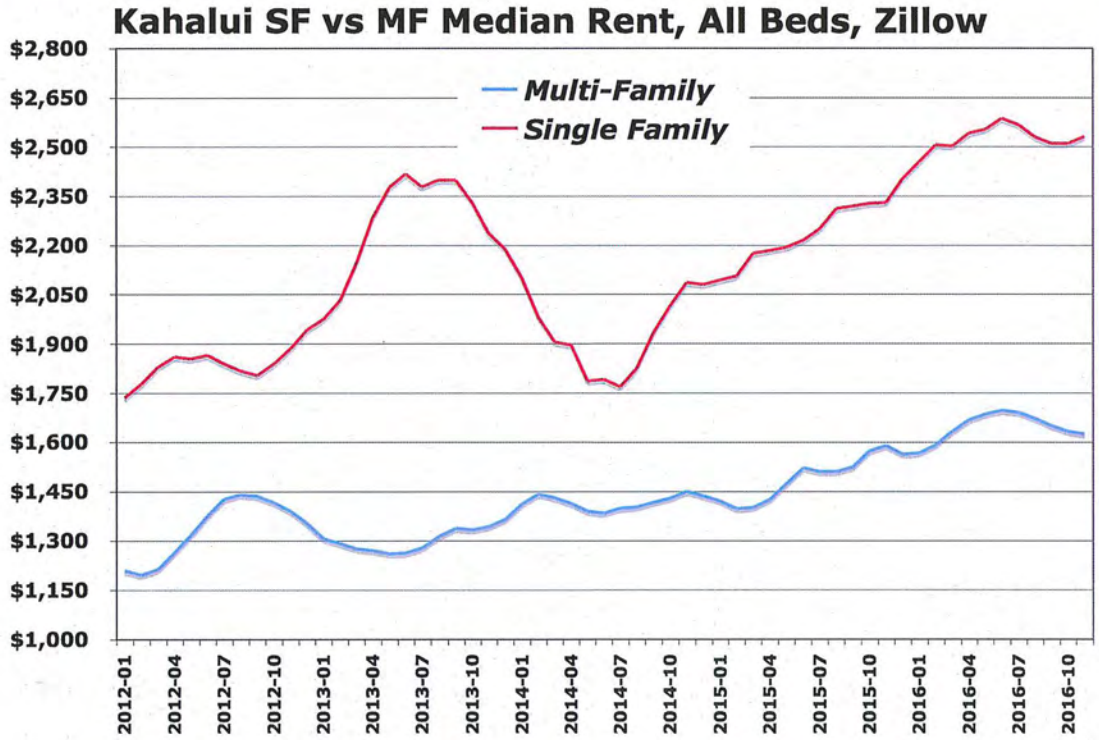
One that provides rental information most comprehensively is Craigslist. In essence, this website replaced the classified ads in the newspapers in terms of being the clearinghouse for rentors and renters. Another source is Zillow.

Rental Market, Per Zillow Data

Zillow Group is an online real estate database company that was founded in 2005 by former Microsoft executives. In addition to giving value estimates of homes, it offers several features including value changes of each home in a given time. Where it can access appropriate public data, it also provides basic information on a given home, such as square footage and the number of bedrooms and bathrooms. In December 2009, Zillow expanded its services to include the rental market. The addition of rental listings enabled users to list a home for rent and search for both rental homes and homes for sale.

Zillow rental data consists of listings, listing prices, estimated listing prices per square foot, and can be segmented by county, zip code, city and neighborhood. While it breaks the data out by property type – homes vs. condos vs. apartments – it does not do it by bedroom counts. As such, it is a good tool for looking at the market overview, but not a good one for making fine distinctions and comparisons between the properties in that data.

Here follows a chart comparing the median rent for single family homes and for multifamily homes. As it does not break out the data by bedroom type, it's value is limited to giving a sent of the market trend.



As seen, the trend is rising, albeit in a volatile fashion.

Rental Market, Per Craigslist Data

Another, and better, set of rental data can be found on Craigslist, a classified advertisements website with sections devoted to jobs, housing, personals, for sale, items wanted, services, etc. It began in 1995 as an email distribution list to friends, then became a web-based service in 1996 and expanded into other classified categories. It started expanding to other U.S. cities in 2000, and now covers 50 countries. The site serves over 20 billion page views per month, putting it in 37th place overall among websites worldwide and 10th place overall among websites in the United States.

As it pertains to rental data, Craigslist is as good, or as bad, as those listing units for rent. This is to admit potential inaccuracies that can degrade the value of the data. There are two general areas of inaccurate data, the worst being 'scam' artists soliciting readers to remit rental deposits for phony units. The second is simple errors or omissions on the part of the imputer of the unit. We make every effort to 'clean' this data, editing the entries for accuracy, integrity and consistency, and are reasonably satisfied that it represents the market fairly. This is especially so, given that this market is significant in terms of both the monetary and emotional investment in finding and securing a dwelling.

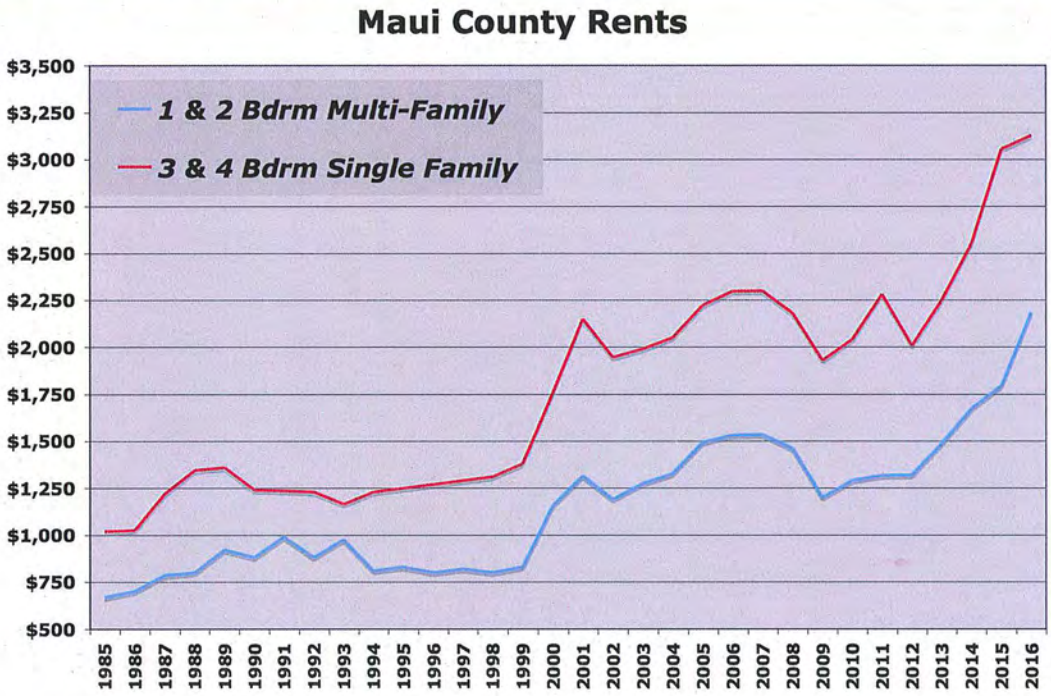
While we have been working with the data for over 10 years, our current database extends backward only to 1st quarter of 2012. This was because before then the utility of this data to the researcher was only in doing spot studies, mainly for affordable housing projects. However, two years ago, the state public housing financing department commissioned a comprehensive rental housing study covering all islands and property types, and asked the start date be set 1Q 2012.

Their methodology intended to update a similar study done in 2011, which used a combination of Craigslist data and data drawn from the classified ads of the local newspaper (a practice that had started in 1985). Per the scope of work, this last study updated those charts, and they are reproduced below. Note that the data here is for 'asking rents' by landlords, but it is segmented by product type (condo, apartment, etc.), bedroom count, and location, minimum – but also, when the data is inputted, by project name, square footage, term (short or long-term) and other terms or characteristics.

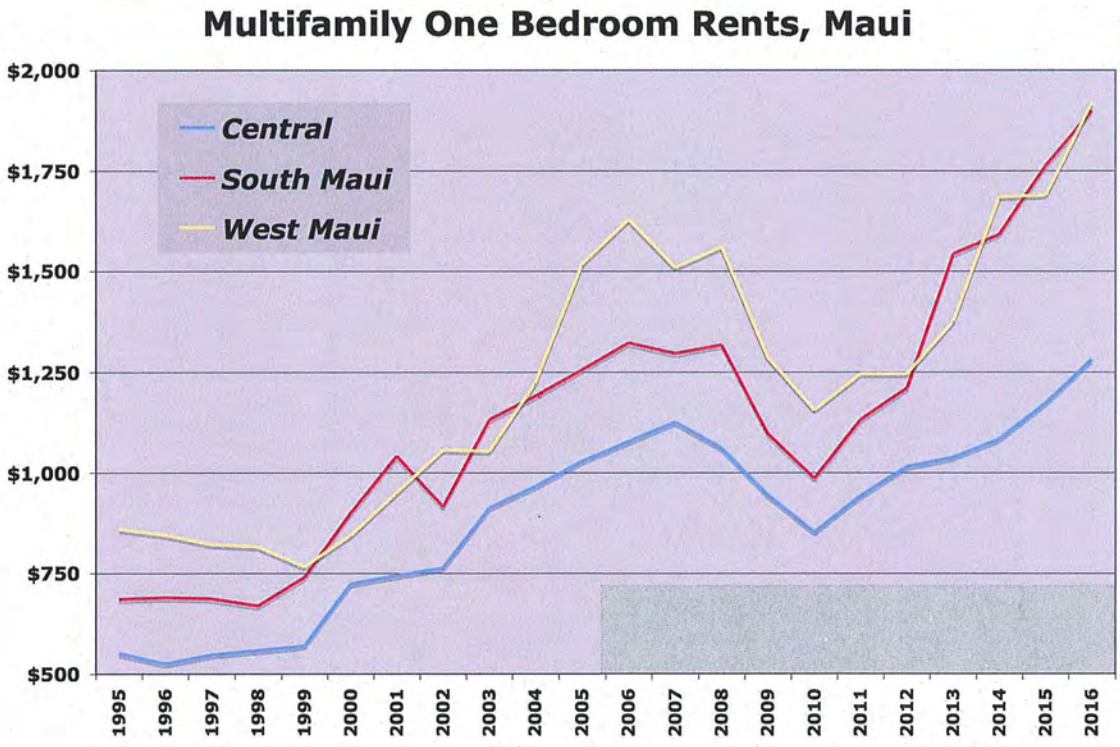
Note: we aggregate the data for town homes, condos and apartments into attached housing, or MF, multi-family housing. While we can break them into these different segments, we find that by combining them, the data provides a better look at the trends affecting the overall rental market.

The following charts show first the overview of the Maui market, and then focus on the multi-family market, as well as the Central Maui market.

(Note that there is no data for the studio or the three-bedroom apartment).

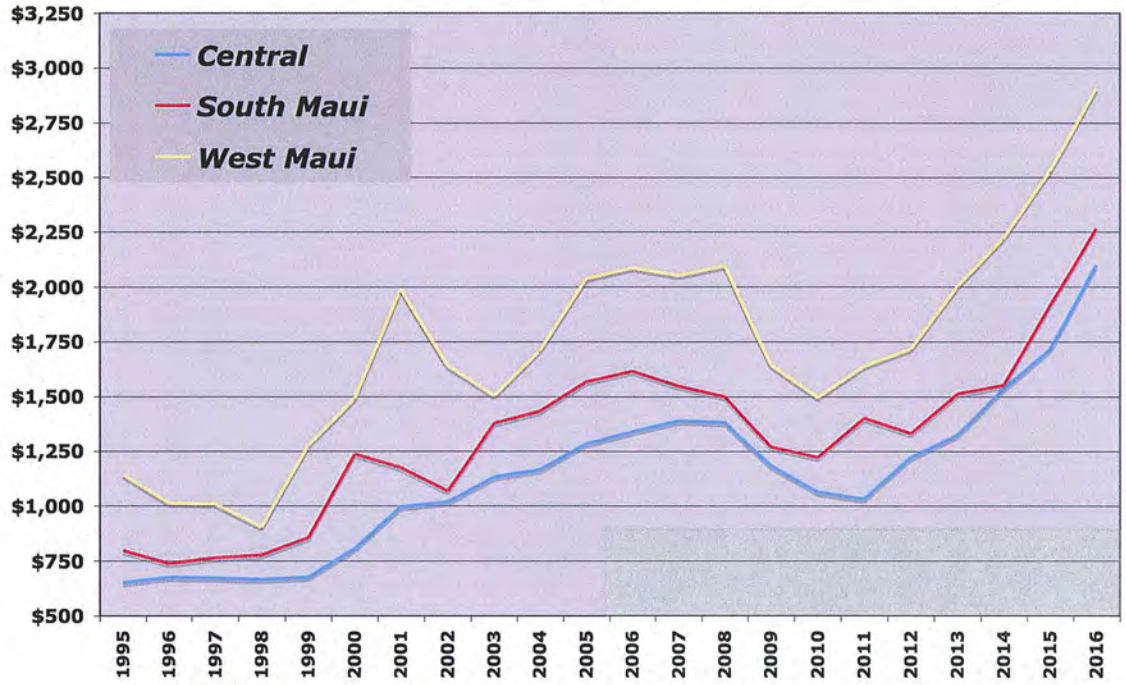


The following charts show the multifamily data since 1995.



As seen, the areas with high rental rates are the same areas that have the major resorts on Maui, South and West Maui.

Multifamily Two Bedroom Rents, Maui



Relative to the one-bedroom market, the rates for two bedroom units are lower in South Maui than in West Maui. This is because South Maui has relatively more stock of multifamily housing than West Maui, housing stock is more appropriate for local families in the workforce.

In every area described, the rental rates in all locations have risen above the levels that were attained in the last real estate market cycle. This trend is consistent with what has been occurring in the for-sale market, by dint of rental rates exceeding the peak in the last cycle.

Indeed, the rental market trend actually is more dramatic than that of the for-sale market in moving higher this cycle – again, in most areas.

In sum, the rental rate trends are going higher, and this then is indicative of market conditions in which either supply is inadequate, or demand is excessive, or both.

IX. CENTRAL MAUI RENTAL TRENDS

The following tables describe the average rents per by bedroom type within the market area, as defined as West Maui, Upcountry Maui, South Maui, Central Maui and the North Shore. It shows it for Three Bedrooms, as well as One and Two Bedrooms.

The first three columns show the counts of listings in Craigslist, and the second three show the average rental rates. In an effort to prevent these averages from being unduly influenced by the offshore visitor rental demand, rental units priced over $4,000 a month were excluded from the data. This has the effect of putting a ceiling on the rental rates for the two and especially the three bedroom units, but it also gives a better reading of rental rate trends that pertain to the target market for market rate units.

RENTAL TREND, 2012-2016, MARKET AREA, LISTINGS & ASKING RENTS

	Studio Listings	One Beds	Two Beds	Three Beds	Studio Rents	One Beds	Two Beds	Three Beds
2012	64	100	114	22	$915	$1,191	$1,627	$1,880
2013	46	68	79	16	$1,071	$1,305	$1,640	$2,181
2014	27	74	69	20	$1,158	$1,424	$1,926	$2,394
2015	27	46	44	17	$1,155	$1,659	$2,151	$2,788
2016	35	52	74	20	$1,200	$1,658	$2,133	$2,591

As seen, the trend shows that listing counts have declined over the last 5 years, and average rental rates have grown in general. That said, this last year, with data current up through the first 3 quarters, shows listings rising, and rental rates rising less than the previous year (falling for the two and 3 bedroom units).

To get a closer look at the market just in the area, the following data excludes all listings in West Maui, Upcountry Maui, South Maui and the North Shore, leaving just the area of Kahului and Wailuku.

RENTAL TREND, 2012-2016, CORE MARKET AREA

	Studio Listings	One Beds	Two Beds	Three Beds	Studio Rents	One Beds	Two Beds	Three Beds
2012	15	18	31	7	$863	$985	$1,184	$1,635
2013	12	17	29	6	$1,035	$1,009	$1,353	$1,798
2014	5	8	15	6	$917	$1,106	$1,429	$2,048
2015	5	7	7	3	$1,231	$1,322	$1,793	$2,183
2016	5	14	21	4	$1,174	$1,279	$1,650	$2,098

Next, we look at the frequency of rental listings by price segment in the following tables. It shows how many listings there were per bedroom type on a quarterly basis, over the last 5 years.

The first table shows the quarterly one bedroom listing counts for the total market area, West Maui to Upcountry (which includes Central, South and North Shore Maui). The second table just concentrates on the core market of just Central Maui.

STUDIO LISTING COUNTS BY PRICE SEGMENT, 2012-2016, MARKET AREA

	2012	2013	2014	2015	2016	Cost Per Day
$700-$799	3	5	1	-	1	*$25*
$800-$899	7	3	3	2	3	*$28*
$900-$999	3	3	2	2	7	*$32*
$1000-$1099	1	2	2	2	5	*$35*
$1100-$1199	3	3	2	1	-	*$38*
$1200-$1299		4	2	3	4	*$42*
$1300-$1399	1	4	1	-	2	*$45*
$1400-$1499	0	1	-	1	2	*$48*
$1500-$1599	2	1	1	2	5	*$52*
$1600-$1699	-	-	1	1	2	*$55*
$1700-$1799	2	1	2	3	3	*$58*
$1800-$1899	1	2	2	3	7	*$62*

STUDIO LISTING COUNTS BY SEGMENT, 2012-2016, CORE MARKET AREA

	2012	2013	2014	2015	2016
$700-$799	2	3	1	-	-
$800-$899	6	1	2	-	1
$900-$999	2	1	1	1	2
$1000-$1099	1	1	1	1	1
$1100-$1199	1	1	-	-	-
$1200-$1299	-	1	1	1	1
$1300-$1399	-	3	-	-	1
$1400-$1499	0	-	-	1	-
$1500-$1599	-	1	-	1	2
$1600-$1699	-	-	-	1	-
$1800-$1899	-	1	-	1	-

As seen, the frequency of listings in the lower price segments has been trending lower. In addition, we see the highest population of listings around the $900-$1,100 range. Given that the units of this project will be very well located, well-designed, very well managed and brand-new, we conservatively believe the main opportunity in this market is right above those price ranges, or around $1,100 to $1,200/month, for market rate units.

A good part of the demand for these units – especially studios, we believe - would be from off-shore renters coming into the market to enjoy a 3-4 month stay – using these units as a substitute for hotel rooms. On that basis, they would be paying under $40/day for units that would run over $120/day. This is why the last column, 'cost per day' is added.

Next, we look at the one bedroom market.

ONE BEDROOM LISTING COUNTS BY PRICE SEGMENT, 2012-2016, MARKET AREA

	2012	2013	2014	2015	2016	Cost/Day
$800-$899	5	5	2	-	1	*$28*
$900-$999	5	2	2	1	1	*$32*
$1000-$1099	4	6	3	1	3	*$35*
$1100-$1199	8	6	4	2	4	*$38*
$1200-$1299	8	4	5	3	6	*$42*
$1300-$1399	1	2	4	2	6	*$45*
$1400-$1499	0	5	3	3	5	*$48*
$1500-$1599	3	2	3	3	5	*$52*
$1600-$1699	4	3	2	4	6	*$55*
$1700-$1799	0	-	1	1	4	*$58*
$1800-$1899	0	2	1	3	2	*$62*
$1900-$1999	-	-	1	2	2	*$65*
$2000-$2099	-	-	1	1	1	*$68*
$2100-$2199	-	-	1	-	1	*$72*
$2200-$2299	1	1	1	2	2	*$75*
$2300-$2399	-	1	1	1	-	*$78*

ONE BEDROOM LISTING COUNTS BY SEGMENT, 2012-2016, CORE MARKET AREA

	2012	2013	2014	2015	2016
$800-$899	4	4	1	-	1
$900-$999	3	1	1	1	1
$1000-$1099	2	4	1	1	3
$1100-$1199	2	3	2	1	3
$1200-$1299	2	2	1	1	2
$1300-$1399	0	1	-	-	1
$1400-$1499	-	1	1	1	2
$1500-$1599	1	-	0	1	2
$1600-$1699	0	-	-	2	1
$1700-$1799	-	-	0	1	1
$1800-$1899	-	-	-	-	1
$2200-$2299	-	-	-	-	1

As seen, the frequency of listings in the lower price segments has been trending lower.

Again, on the supposition that a new one-bedroom unit will out-compete an existing one-bedroom unit, on the open market, it looks like the conservative price point opportunity here is around the $1,799 to $1,899 rental price segment.

And, again, these units are a good deal in comparison with taking a hotel room or a short-term rental at VRBO (which has now migrated their pricing upwards, in relation to hotel room rates).

Next, we look at the two-bedroom market.

TWO BEDROOM LISTING COUNTS BY PRICE SEGMENT, 2012-2016, MARKET AREA

	2012	2013	2014	2015	2016	*Cost/Day*	*Cost/Day/ Bedroom*
$1000-$1099	6	2	0	-	-	*$35*	*$17*
$1100-$1199	12	2	1	-	1	*$38*	*$19*
$1200-$1299	18	9	4	1	-	*$42*	*$21*
$1300-$1399	9	7	9	1	2	*$45*	*$22*
$1400-$1499	7	18	5	3	5	*$48*	*$24*
$1500-$1599	4	5	3	1	4	*$52*	*$26*
$1600-$1699	5	4	3	4	2	*$55*	*$27*
$1700-$1799	1	2	2	4	5	*$58*	*$29*
$1800-$1899	4	2	2	2	3	*$62*	*$31*
$1900-$1999	1	1	1	2	2	*$65*	*$32*
$2000-$2099	2	1	2	3	1	*$65*	*$34*
$2100-$2199	1	1	3	1	5	*$68*	*$36*
$2200-$2299	1	1	3	3	5	*$72*	*$37*
$2300-$2399	0	1	2	-	1	*$75*	*$39*
$2400-$2499	0	2	1	1	4	*$78*	*$41*
$2500-$2599	1	1	3	2	4	*$82*	*$42*
$2600-$2699	0	1	1	3	3	*$85*	*$44*
$2700-$2799	-	1	2	1	2	*$88*	*$46*

TWO BEDROOM LISTING COUNTS BY SEGMENT, 2012-2016, CORE MARKET AREA

	2012	2013	2014	2015	2016
$1000-$1099	3	2	0	-	-
$1100-$1199	6	1	1	-	1
$1200-$1299	11	5	3	1	-
$1300-$1399	2	4	4	-	1
$1400-$1499	1	13	4	1	4
$1500-$1599	1	1	1	-	4
$1600-$1699	2	1	1	1	2
$1700-$1799	-	1	0	1	2
$1800-$1899	0	-	1	2	1
$1900-$1999	-	-	-	1	-
$2000-$2099	-	-	0	-	-
$2200-$2299	-	-	-	1	-
$2400-$2499	-	1	-	1	-
$2500-$2599	-	-	-	-	1
$2900-$2999	-	-	-	-	1

The same trends as above, but the opportunity segments are less defined, more diffuse. One area that stands out would be the $2,100 to $2,299 segment, maybe higher. Again, these units are a deal in comparison with taking a hotel room, especially on a per room basis.

Finally, we look at the three-bedroom market.

THREE BEDROOM LISTING COUNTS BY PRICE SEGMENT, 2012-2016, MARKET AREA

	2012	2013	2014	2015	2016	*Cost/Day*	*Cost/Day/ Bedroom*
$2000-$2099	2	1	1	1	-	*$68*	*$23*
$2100-$2199	-	-	1	1	1	*$72*	*$24*
$2200-$2299	-	1	1	-	1	*$75*	*$25*
$2300-$2399	0	1	2	1	1	*$78*	*$26*
$2400-$2499	1	1	2	1	4	$82	$27
$2500-$2599	0	1	1	1	3	$85	$28
$2600-$2699	-	2	1	1	2	$88	$29
$2700-$2799	1	1	0	1	1	$92	$31
$2800-$2899	0	1	2	2	-	$95	$32
$2900-$2999	-	-	0	1	-	$98	$33
$3000-$3099	0	-	2	1	-	$102	$34
$3200-$3299	0	1	1	1	-	$108	$36
$2400-$2499	1	1	2	1	4	$82	$27

THREE BEDROOM LISTING COUNTS BY SEGMENT, 2012-2016, CORE MARKET AREA

	2012	2013	2014	2015	2016
$2000-$2099	0	-	1	1	-
$2100-$2199	-	-	1	1	1
$2200-$2299	-	1	-	-	-
$2300-$2399	0	1	1	1	-
$2400-$2499	-	-	1	-	1
$2500-$2599	-	-	-	1	1
$2600-$2699	-	-	0	-	-
$2800-$2899	-	1	0	-	-
$2900-$2999	0	-	1	-	2
$3000-$3099	-	-	1	1	-

The data here is not very deep, making it harder to determine the obvious market opportunity. The reason why is that there is no inventory, nothing was built in terms of attached housing for-sale.

To better see the demand, we include the data for 3 bedroom houses into the data.

THREE BEDROOM LISTING COUNTS BY SEGMENT, 2012-2016, MARKET AREA

	2012	2013	2014	2015	2016	*Cost/Day*	*Cost/Day/ Bedroom*
$2200-$2299	3	3	2	1	3	*$75*	*$25*
$2300-$2399	5	3	5	4	3	*$78*	*$26*
$2400-$2499	4	4	3	2	6	*$82*	*$27*
$2500-$2599	6	2	4	6	5	*$85*	*$28*
$2600-$2699	3	3	2	2	5	*$88*	*$29*
$2700-$2799	2	2	1	1	3	*$92*	*$31*
$2800-$2899	2	3	4	3	5	*$95*	*$32*
$2900-$2999	0	-	3	3	6	*$98*	*$33*
$3000-$3099	-	1	3	5	3	*$102*	*$34*
$3100-$3199	-	-	0	1	1	*$105*	*$35*
$3200-$3299	2	2	2	3	3	*$108*	*$36*
$3300-$3399	1	2	0	1	5	*$112*	*$37*

THREE BEDROOM LISTING COUNTS BY SEGMENT, 2012-2016, CORE MARKET AREA

	2012	2013	2014	2015	2016
$2200-$2299	1	2	1	1	-
$2300-$2399	1	1	2	2	1
$2400-$2499	1	1	1	-	2
$2500-$2599	0	1	1	1	1
$2600-$2699	2	1	1	-	1
$2700-$2799	-	1	-	-	2
$2800-$2899	1	1	1	1	1
$2900-$2999	0	-	1	-	2
$3000-$3099	-	-	1	1	-
$3100-$3199	-	-	0	-	-
$3300-$3399	-	-	-	-	1

As seen, there are a higher number of listings in the general area, but not in the core area of just Central Maui. Thus, we see demand, and suggest it conservatively would be in the $2,600 to $2,799 range.

It could be higher, but what is hard to know without data. However, there is data in another area that might speak to the potential demand for bedrooms, the area of short-term visitor oriented rentals, known also as the home-stay or the home-share business.

The following is a rough estimate of this model on Maui.

HOMESTAY BUSINESS MODEL, MAUI

	Listings	Trip Nights/year	Host Revenue	Ave Revenue Per Host	Average Daily Rate
2015	1,700	100,000	$16,000,000	$9,000	$200
2016	2,700	160,000	$29,000,000	$10,000	$233

Of note in this data is the business of renting out a private room in the owner's unit. This practice is widespread on Maui, and we estimate that there are over 300 hosts in the general market area who charge over $110 a night, and gain over $7,500/host per year. This is akin to discounting the monthly rent by $600/month.

If the room is shared, not private, the nightly rate drops to about $40/night and the monthly supplemental (or discount) comes to $350/month.

These numbers double if there are two rooms 'in service' so to speak. We ran some more estimates and found that these numbers are higher for the core area, save for the number of hosts, which are probably a third of the general area (or $100 for renting out a private room).

X. CURRENT AND FUTURE DRIVERS OF RENTAL DEMAND

Current:

Currently, there are two significant sources of demand:

1. Local or long-time residents.
2. Off-shore 'visitors' or recent immigrants, and

In the first case of the existing long-term rental demand, there is a significant portion of the local population that is 'under housed' in the sense that they are unable to find themselves housing shelter at a price affordable to their incomes. Indeed, some 25% of all households in the state and on Maui are at very low-income levels, 80% of median income and below.

This condition has existed for decades, since the boom of the visitor in the 1970s, followed by the second home industry, in the 1980s. It will not be satisfied in any significant degree anytime soon, meaning the next ten years. Thus, this sets a floor beneath which current rents – and even next year's rents - will not easily sink below. Like the prices in the for-sale market, the rents in the rental market are 'sticky' downward – they rarely decline, and do so only in sync with a major economic event (like the Gulf War, or the Sub-Prime Recession).

In the second case, there is strong demand for market-rate rental housing, and that comes from both out of state and outside the US, driven by Maui's high quality of living. This has been shown in the high percent of outside investors, and the non-owner occupant units.

Future:

Looking ahead, these drivers of demand will grow. The first will be fed by the overall growth of the local economy on Maui and the concurrent rise in the personal wealth. Note that this growth is strongly correlated to the growth of the US economy, the Californian economy and the general rise in the financial markets. Simply put, the rental housing market on Maui responds better than most housing markets in the US to growth at the high-end, by the linkage between high-end wealth generation and the island's visitor traffic and second home industry.

The second - offshore demand - will grow also with the general US economic growth, but also the growth in their 'home' market or the industry or community where they make their money. For Maui, this is both Northern and Southern California, as well as Canada. We expect that Maui's visitor industry will continue to enjoy success and thereby cultivate amongst a portion of the short-term visitors a desire to lengthen their stay the following trip by renting a unit for 3 months, the minimum period for this project. We expect the demand here coming out of Canada and the northern states of the US.

The third, demand will be driven by the continuation of the popularity of Maui life-style in the younger demographics in North America and Asia. This includes, at the lower end, the younger demographic (i.e., aficionados of extreme sports, such as wind-surfing, paddle boarding, big wave surfing, etc.). At the upper end, this would be those in a dynamic and growing business or industry, such as electronic hardware and software, and entertainment. These slightly older demographics constitute a group looking to rent on island at the most reasonable rates (as well as at the highest value). Finally, there would be a senior demographic component, those wanting to just get away from the weather in their residence or taking the grandchildren for a summer holiday. Thus, a newly built rental property that is off-water and convenient would be attractive.

We see all sources of demand being present and accounted for (the first being particularly significant) over the life of the project (say, 35-50 years). Over the long run, the offshore demand being more remunerative or profitable, but more volatile. The local demand will be less remunerative, but valuable in terms of stability, both in terms of turnover and community responsibility. We suggest there be a healthy mix, as the local presence will make project more attractive to the offshore rental demand.

XI. CURRENT AND FUTURE PROSPECTS FOR RENTAL SUPPLY

In contrast to demand, we now examine the supply side of the market. The overview is that there are very few large size rental unit projects in the state – they have not been very feasible historically: limited land, little capital, high costs, small market, and isolated from continental US.

In terms of Maui, no large-scale dedicated rental projects have been built in Maui since 1990 that where not subsidized. Furthermore, apartment counts and size data is not readily available, unlike condominiums and town homes. However, earlier studies on the overall market determined that there were 3,702 apartment units in the county. Of those, some 2,340 are subsidized units. This would mean that there are only about 1,350 market apartments on all of Maui, at maximum. That said, the actual number is probably lower, given that apartment units are normally government-owned or corporation-owned (the former as military housing, the later as corporate timeshares).

Current:

AFFORDABLE PROJECTS:

Given rising for-sale prices and high rents, the affordable inventory on the island is fully occupied with long wait lists. Here follows a partial list of such projects.

SELECTED AFFORDABLE RENTAL HOUSING PROJECTS, MAUI

Name	Units	AMI	Where	Studio	Rent Studio	One Bed	Rent One Bed	Vacancy	Waitlist
Hale Mahaolu Akahi	5	50%	Central	5	$514			0	60
Hale Mahaolu Akahi	68	50%	Central	68	$593			1	70
Hale Mahaolu Akahi	37	50%	Central			37	$673	0	90
Hale Mahaolu Eha	40	50%	Central	39	$825			0	279
Hale Mahaolu Ehiku, Ph. IA	34	30%	Central			34	$940	0	61
Hale Mahaolu Ehiku, Ph. IB	20	50%	Central			19	$800	0	79
Hale Mahaolu Ehiku, Ph. II	30	30%	Central			30	$653	0	166
Hale Mahaolu Ehiku, Ph. II	29	60%	Central			29	$1,055	0	20
Hale Mahaolu Ekolu	42	50%	Central	10	$1,336	31	$1,487	0	250
Hale Mahaolu Elima	60	50%	Central			59	$667	1	302
Hale Mahaolu Elua	180	60%	Central			179	$1,089	1	370
Lokenani Hale	62	50%	Central			61	$625	0	100
Hale Mahaolu Eono	10	50%	West			10	$1,020	1	33
Hale Mahaolu Eono	19	50%	West			19	$1,020	0	33
Hale Mahaolu Eono	5	50%	West			4	$825	0	88

Furthermore, there is not much in the pipeline. The table below shows the recent awards from Hawaii Housing Finance and Development Corporation on Maui. As seen, there has been very little activity, of late.

AFFORDABLE RENTAL HOUSING PROJECT AWARDS, MAUI

PROJECT	Hale Mahaolu Ehiku	Kahului Town Terrace	Puukolii Mauka I	Hale Mahaolu Ehiku P 2	Honokowai Villa Apartments	Imi Ikena Apartments
Award Year	2004	2007	2007	2008	2009	2011
Units	34	72	100	60	56	28
Location	Kihei	Central	West	Kihei	West	Central
Rent/4Sale	Rent	Rent	Rent	Rent	Rent	Rent
LIHTC	YES	YES		YES/1602	YES/1602	YES
RHTF		YES			YES	
HMMF		YES				
201H			YES			
GET	YES	YES		YES	YES	YES

MARKET RENTAL PROJECTS:

There are only two dedicated large-scale rental properties in the market area that we could find.

Piilani Gardens was built in the early 1990s on 13.4 acres of land and has a density of 15 units per acres. There are 18 garden style apartment buildings. They have 200 units of 2bd/2ba (3 floor plans of 800-925sf), with appliances included (oven/range, refrigerator, dishwasher, garbage disposal) but not laundry. There are 2 assigned parking stalls, one covered, with extra stalls running $80/month. They have 6 months to 1-year leases, running at 1,625-$1,725 per month ($1.92 - $2.04/sf) ($50 extra for a premium downstairs unit).

The amenities on site include a childcare center, self-storage units ($80 per unit), Satellite TV and Internet services, and fenced yards. A property manager operates the property professionally, as opposed to living in a project with owners and renters.

Currently there are no vacancies with a long waitlist, as most tenants work nearby in the resort area. Per the rental agents there is a demand for 3 bedrooms, typically from extended families over 5 members in a household.

That said, the complex gets consistently bad reviews on YELP, with the main culprits being aged appliances, poorly kept carpets and inconsiderate management.

The Waterfront Apartments in Kahului is the other property whereby the owners have converted dormitory rooms as apartments. Students weren't leasing them so they opened the project to the public. The conversion brought the fixtures and furnishings up to date, but they couldn't do much with the floorplan layout, as most units are narrow rectangles that originally accommodated roommates. The property is gated with security patrol. The buildings is 4 stories, with one elevator, a common laundry room, a simple community room and interior courtyard. It comes with cable, water, trash, and wifi. Kitchens are smaller with very little counter and pantry space because it was purpose built for students and not households of various sizes.

They have 113 units, studios (300-400 sf, renting for $900) and one bedrooms (475-525 sf, renting for $1,500 to $1,650), but mainly 2 bedroom/1.5 baths (750-775 sf, renting for $1,750 to $1,850, with view units higher, $1,895-$1,995).

In contrast with the Piilani Gardens, the YELP reviews of this property are less negative, with the main drawback being the smell of sewage from the harbor.

Pipeline Projects:

AFFORDABLE PROJECT:

To our knowledge, there is only one affordable project that is eminent. The developer is the Catholic Charities and they successfully applied for LHITR funding in 2015 (and are likely to reapply this year). It is in Kahalui, the market area, and is called Kane Street Elderly.

It will be producing only one-bedroom unit rentals for those making approximately 30%, 50% and 60% of the Area Median Income (AMI). The table below describes the project's number of units by AMI count.

UNIT BREAKDOWN

	Counts
AMI @ 30%	16
AMI @ 50%	16
AMI @ 60%	132

MARKET RATE:

There is a proposed 74.871-acre project sit located in Kihei, mauka of the intersection of Kaonoulu Road and Piilani Highway, called Piilani Promenade North. The project boundary is adjacent to the Kihei Commercial Center to the North, Kulanihakoi Gulch to the South, Piilani Highway to the West, and ranch land to the East extending up to Kula

It is anticipated that the Piilani Promenade project will be constructed in two (2) phases as market conditions warrant:

- Phase one is the Piilani Promenade North development will include development of the northern developable lot (Parcel 16) that will include 100,000 square feet of business commercial uses, 226 rental apartment uses and 57,558 square feet of light industrial use. Phase one includes construction of the future Kihei Upcountry Highway and improving the intersection of Kaonoulu and Piilani Highway that provides access to the project. Phase one also includes construction of the 1.0 MG water tank, the irrigation well with pump and related utility and offsite easements.

- Phase two is the development of the 2 southern parcels (Parcels 170 and 171) that will consist of 430,000 square feet of business commercial.

The proposed multi-family component will consist of 226 units with a 2-acre park space and necessary support infrastructure including, but not limited to, off-street parking, sewer, water, roadways, and sidewalks. The units will be a mix of one, two and three bedroom units, of which 25% (current requirement) will be rented at an affordable rate in compliance with the Maui County Residential Workforce Housing Ordinance.

Future:

If we ask what will drive supply into the market, first and foremost, we believe rental-housing supply will be constrained by high costs, politics, and NIMBYism.

The net of this has been a high barrier to entry for all multi-family projects on Maui historically - and this barrier has been overcome almost only by high-end multifamily properties, meaning waterfront (and resort) properties.

That said, this barrier to new multifamily construction has been overcome when there have been public subsidies available, no matter what the economic cycle is. It has also been overcome when market demand and economic prosperity are strong and costs are low. This only happens in the first couple years of the market's upswing, while construction costs are low and the market is bouncing back up (construction costs will rise as more development crowds into the market, thus raising labor costs).

Relative to the proposed project here, the current barriers to entry for this project are relatively low, given the point in time for the housing cycle (moving from recovery to expansion) and the cumulative effect of a low production of rental housing historically.

Thus, we address the possibility of competitive interference – in terms of a similar rental project coming to market either before or after that can cannibalize demand (and thus limit the project's occupancy and hold down the project's market rental rates).

Because this is the first project in a very long time, it will benefit by being the first to market (it will present a barrier to market by taking away current and future demand). Projects coming after this project in this area will be harder pressed to project out (expect) adequate demand. In this cycle, the next projects will not have the benefit of having today's lower construction costs.

As a footnote, there simply are not a lot of resources available (i.e., quality construction crews, adept construction management and astute political ability and guidance) in the state and the county for such a project. And once those resources are absorbed or put into play by this project, then the aforementioned barriers to entry that are in place for the rest of the cycle come into play.

XII. MARKET REVIEW & PROJECT RENT RATE SUGGESTION

OVERALL: In sum, the economic context is that the global recovery has taken hold and has been feeding housing demand on Maui via tourism. The current demand is additional to the pent-up demand that has been growing for a generation.

Looking ahead, there are several significant renovations in the works for two of the four major Maui resorts – Makena and Kaanapali. The Makena renovation is quite large and includes both renovating an existing hotel and new construction. It is being marketed by Discovery Land, an ultra-high end marketer. It will stimulate quality jobs, thus housing demand for both work-force families and higher-end professional households, starting next year and extending well into the next decade. The Kaanapali resort renovation will not have an effect for 4-6 years, and maybe not until the next economic cycle. However, it will be significant, and act beneficially in the same way as the Makena redevelopment, both in this area of South Maui, as well as in West Maui.

Given that the residential market has lifted off the bottom of the cycle, we expect that the market in the near and mid-term will see a significant appreciation of prices. Further, the production of

new for-sale housing on Maui, has been at a low point historically thus will be inadequate for meeting the housing needs of the growing workforce and population.

Much of this is attributed to over regulation by the public and their political representatives, who instituted an unrealistic affordable housing requirement to housing production in 2006, which required a 50% affordable requirement (half of the total units could not be 'market' units, and had to be sold or rented out at affordable prices and rents).

As can be seen in the earlier sections, tables and charts, the effect on Maui's housing supply during this period was detrimental to the production of market (or any) housing. These regulations have since been lightened in 2014 and housing production has come back to Maui.

And that is why we expect this development of rental housing in Central Maui will be successful – not only will it benefit from strong demand, but limited supply.

Looking ahead at where demand for rental housing in Maui will come from, it will come first and foremost from families already living on island that are 'workforce' and immediately above that segment (moving up the housing ladder). These workforce households will be involved in service industries, perform construction jobs - both of which are good wage occupations. The fit for these households in terms of this project here is value and convenience: a new rental dwelling that is reasonably priced, well managed, in a new community that has amenities, in a central location.

Then, there will be additional demand from offshore individuals and families who value the high quality of life on the island. They can either work on Maui full-time or work elsewhere for some the year, then come and vacation on Maui for 3 months of the year. We think this demand will grow, overtime, as jobs become unteethered from location, and knowledge workers or financially independent individuals live where they want.

RENTAL RATES: Our suggested affordable unit counts are driven by need, as described by potential demand using Ribbon Demographics data. Our rental rates were given by the county housing office, in conjunction with HUD requirements.

UNIT MIX VS POTENTIAL HOUSING DEMAND, HOUSEHOLDS AGED 25-54 YEARS BY AMI

Bed	AMI	Units	Potential Demand	Market Share
1	80%	60	534	11%
1	100%	50	486	10%
2	120%	71	288	18%
1	Market	20	916+	NA
2	Market	80	1,146+	NA
3	Market	20	720+	NA

Our market rental rates take into account the aforementioned lack of supply and surplus of demand from the local residents. In conversations with rental managers and housing officials, there is evidence of renters joining together, room-mate style, in order to be able to rent bigger units.

There will be additional demand from offshore renters. It may be likely that offshore demand might even be as high as a quarter or a third of the units. A reading of the comments on YELP in reviewing the current rental projects in Central Maui demonstrates that there is an apparent offshore demand for these types of units.

The other source of market preferences that we think is worth considering comes from a housing survey done every 5 years. It asks the respondents "What is their preferred number of bedrooms?"

The following table describes the Maui respondent's preferences:

UNIT MIX AS INDICATED BY SURVEY PREFERENCES

Year	Studio or One	Two Bed	Three Bed	4 Bed or More
1992	6.40%	41.00%	49.00%	1.00%
1997	17.90%	34.30%	34.80%	12.70%
2003	9.10%	37.40%	34.00%	18.10%
2006	7.50%	43.70%	35.90%	11.90%
2011	11.60%	47.30%	34.80%	6.30%
2016	11.20%	41.90%	36.90%	8.90%

This indicates a strong preference for a three-bedroom unit. Note, though, it does not make a distinction between attached or detached housing. Nor does 'preference' indicate 'acceptance' or 'ability to make rental payments.' Nevertheless, we believe a three-bedroom model in this mix is prudent in terms of diversifying product and risk, and proactive in meeting the market, especially the offshore one.

PROJECT MIX AND RENTAL RATES: That said, we have weighted the mix most onto the 2 bedroom unit, as that is the most adaptable in the market, and has the highest preference. We have given second strongest weighting to the one bedroom unit, as that has the deepest demographic, as an affordable unit. Plus, we expect very good offshore demand for a small unit, such as this.

Our rental mix shows a small number of three bedrooms, based on our belief that the housing stock of the island shows a scarcity of larger bedroom counts (3 bedrooms and above) units. The demand for the three bedroom units will come from multi-tenant renter occupants (room-mates teaming up), as well as multigenerational families. We also see a good potential demand for renting them out on the minimum lease of 3 months to offshore visitors, grandparents who will cycle their grandchildren through the unit over the summer or winter months.

There are no studios, as they attract a more transient demand, especially at the market level – but if there's a cost/benefit argument for migrating out of the one-bedroom units and into the studios, that's acceptable (risk diversification, as well a desirable unit in 30 years when put out to market).

UNIT MIX AND RENTAL RATE MODEL

Bed	AMI	Units	Rents, Affordable	Rents, Market
1	80%	60	$1,000	
1	100%	50	$1,305	
1	Market	20		$1,799 to $1,899
2	120%	71	$1,797	
2	Market	80		$2,100 to $2,299
3	Market	20		$2,600 to $2,799

Note that the mix has 180 affordable units, or 59.9%.

RENTAL RATES: in terms of the affordable rates, the original projected program is acceptable. Indeed, they are advantageous, relative to some of the existing affordable rental projects in

Central Maui.

In terms of the market rents, these rates are at or slightly higher than the published rates of existing rental projects. They are so because these will be newly constructed, professionally marketed and competently managed. The two projects that exist currently, and therefore are the major comparables in this study, are – at best – neither. This goes for both the one bedroom and the two-bedroom unit.

The three-bedroom unit rental rate was set in comparison to the three bedroom single family offerings on the market, and the rents on these multifamily units currently are set a little bit higher than for the single family or detached units. This is achievable for several reasons: the aforementioned local and offshore demand. In terms of local demand, the strongest selling point of the big unit would be the security of the property, given that those households would contain school age children and/or elderly grandparents. Thus, a working mother could count on her children being watched over by the project security, and be happy that there are public schools in the immediate area. The other local demand could come from roommates teaming up.

APPENDIX H

TRAFFIC IMPACT ANALYSIS REPORT

TRAFFIC IMPACT ANALYSIS REPORT
WAILUKU APARTMENTS
WAILUKU, MAUI, HAWAII

FINAL DRAFT

May 25, 2018

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TRAFFIC IMPACT ANALYSIS REPORT
WAILUKU APARTMENTS

Wailuku, Maui, Hawaii

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C. LEVEL OF SERVICE CALCULATIONS

D. TRAFFIC SIGNAL WARRANT

E. BACKGROUND PROJECT TRIPS

AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

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WAILUKU APARTMENTS
TRAFFIC IMPACT ANALYSIS REPORT

Wailuku, Maui, Hawaii

1. INTRODUCTION

This report documents the findings of a traffic study conducted by Austin, Tsutsumi & Associates, Inc. (ATA) to evaluate the potential traffic impacts resulting from the proposed Wailuku Apartments (hereinafter referred to as the "Project") located in Wailuku, Maui, Hawaii.

1.1 Location

The Project is located in Wailuku on the island of Maui on parcels of land more specifically identified as TMK: (2) 3-5-001-064. The Project will be bounded by Honoapiilani Highway, Kuikahi Drive and Waiale Road. See Figure 1.1 for Project location.

1.2 Project Description

The Project proposes to develop approximately 14.4-acres of land to provide 324 multi-family dwelling units. Vehicular traffic to the Project will be provided by two (2) new Project accesses; one along Kuikahi Drive directly across the Kehalani Village Center driveway and another along Waiale Road towards the south frontage of the Project site. The Project is anticipated to be completed by the Year 2021. See Figure 1.2 for Project Site Plan.

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WAILUKU, MAUI, HAWAII
HILO, HAWAII

1.3 Study Methodology

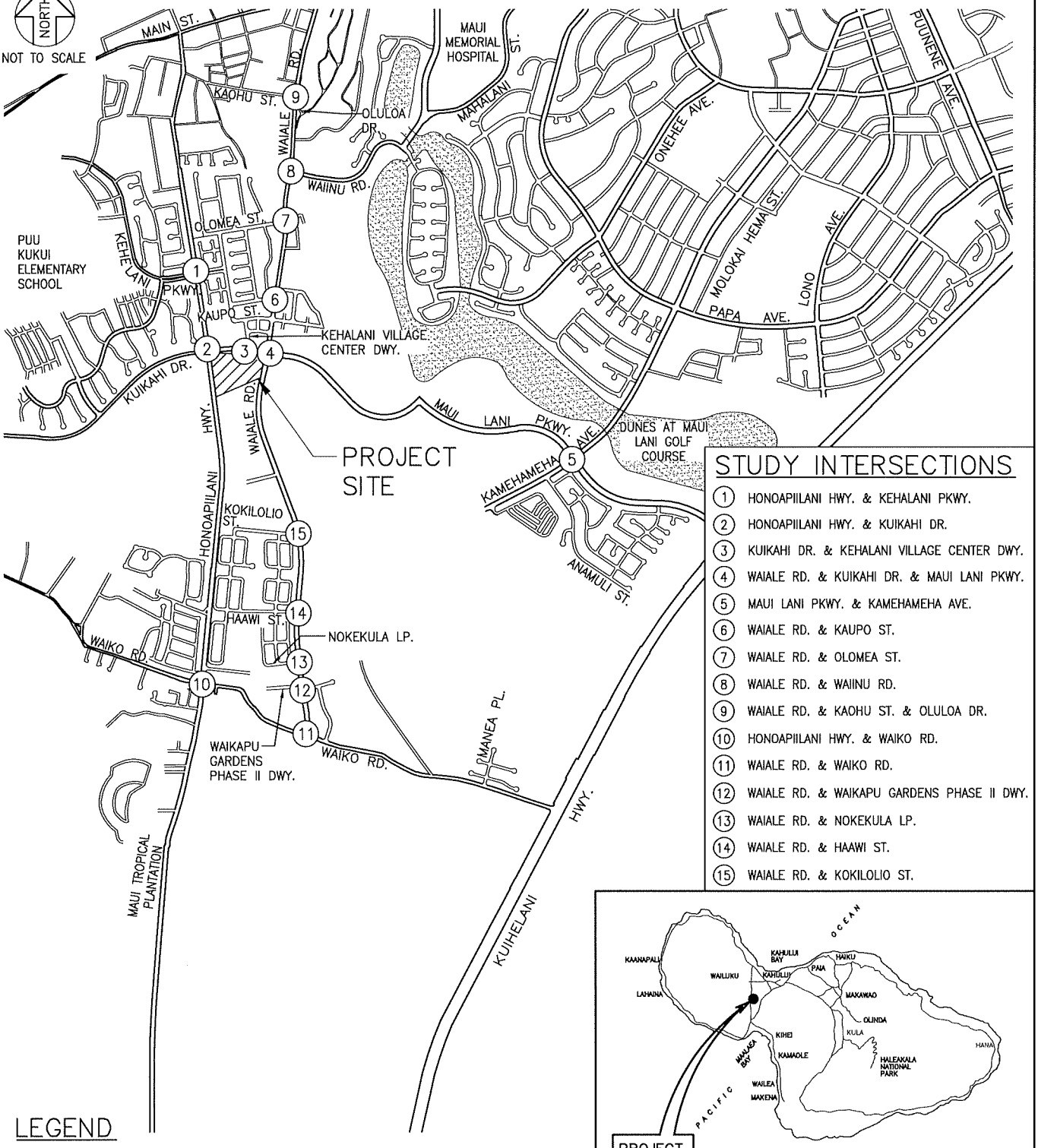
This study will address the following:

- Assess existing traffic operating conditions during the weekday AM and PM peak hours of traffic within the study area.
- Traffic Projections for Base Year 2021 (without the Project).
- Estimate the vehicular trips that will be generated by the Project.
- Traffic projections for the Project for Future Year 2021 (with Project).
- Recommendations for roadway improvements or other mitigative measures, as appropriate, to reduce or eliminate the adverse impacts resulting from traffic generated by the Project.

1.4 Intersection Methodology

Level of Service (LOS) is a qualitative measure used to describe the conditions of traffic flow at intersections, with values ranging from free-flow conditions at LOS A to congested conditions at LOS F. The Highway Capacity Manual (HCM), 6th Edition, includes methods for calculating volume to capacity ratios, delays, and corresponding Levels of Service that were utilized in this study. See Appendix B for Level of Service Criteria.

Analyses for the study intersections were performed using the traffic analysis software Synchro, which is able to prepare reports based on the methodologies described in the HCM. These reports contain control delay results as based on intersection lane geometry, signal timing, and hourly traffic volumes. Based on the vehicular delay at each intersection, a LOS is assigned to each approach and intersection movement as a qualitative measure of performance. These results, as confirmed or refined by field observations, constitute the technical analysis that will form the basis of the recommendations outlined in this report.



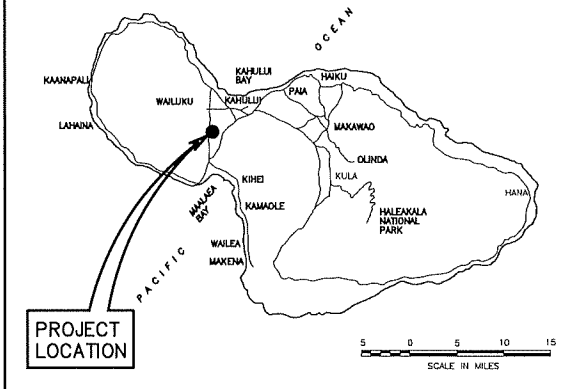
STUDY INTERSECTIONS

1. HONOAPIILANI HWY. & KEHALANI PKWY.
2. HONOAPIILANI HWY. & KUIKAHI DR.
3. KUIKAHI DR. & KEHALANI VILLAGE CENTER DWY.
4. WAIALE RD. & KUIKAHI DR. & MAUI LANI PKWY.
5. MAUI LANI PKWY. & KAMEHAMEHA AVE.
6. WAIALE RD. & KAUPO ST.
7. WAIALE RD. & OLOMEA ST.
8. WAIALE RD. & WAIINU RD.
9. WAIALE RD. & KAOHU ST. & OLULOA DR.
10. HONOAPIILANI HWY. & WAIKO RD.
11. WAIALE RD. & WAIKO RD.
12. WAIALE RD. & WAIKAPU GARDENS PHASE II DWY.
13. WAIALE RD. & NOKEKULA LP.
14. WAIALE RD. & HAAWI ST.
15. WAIALE RD. & KOKILOLIO ST.

LEGEND

(X) STUDY INTERSECTIONS NEAR THE PROJECT

PROJECT SITE



ISLAND OF MAUI

WAILUKU APARTMENTS

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

LOCATION MAP

FIGURE 1.1

NORTH

NOT TO SCALE



WAILUKU APARTMENTS	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII	FIGURE
	PROJECT SITE LOCATION	1.2

2. EXISTING TRAFFIC CONDITIONS

2.1 Roadway Network

The following are brief descriptions of the existing roadways studied within the vicinity of the Project:

Honoapiilani Highway is a north-south, two-way, two-lane, undivided arterial highway with posted speed limits ranging between 30 miles per hour (mph) and 45 mph. Honoapiilani Highway begins as the continuation of South High Street near Kahookele Street and continues southward through Waikapu, Maalaea, and wraps around the "Pali" to West Maui. Right turn channelization is provided at all of its major intersections within the study area.

Kuikahi Drive is an east-west, two-way, two-lane, undivided collector roadway with posted speed limits ranging between 25 mph and 30 mph. Kuikahi Drive begins approximately 1.2 miles west of Honoapiilani Highway within the Wailuku Heights development and extends eastward past Honoapiilani Highway, terminating near The Church of Jesus Christ of Latter Day Saints, where Kuikahi Drive becomes Maui Lani Parkway.

Waiale Road is a north-south, two-way, two-lane, undivided collector roadway with a posted speed limit of 20 mph in the Project study area. To the north, Waiale Road serves as the southern connection to Lower Main Street and extends past the Maui Community Correctional Center, Kehalani Village Center and various residential subdivisions, eventually terminating at a T-intersection with East Waiko Road.

East Waiko Road is an east-west, two-way, two-lane, undivided collector roadway with a posted speed limit of 20 mph in the Project study area. East Waiko Road extends westward from Kuihelani Highway to Honoapiilani Highway where it continues as West Waiko Road within the Waikapu residential neighborhood.

Kehalani Parkway is an east-west, two-way, four-lane, divided collector roadway with posted speed limits ranging between 20 mph and 30 mph on either side of Honoapiilani Highway. Kehalani Parkway extends east of Honoapiilani Highway from the lower Kehalani residential subdivision at Kamole Street and continues in the mauka direction, curving north past Puu Kukui Elementary School in the upper Kehalani residential subdivisions.

Nokekula Loop, Haawi Street & Kokololio Street are east-west, two-way, two lane, undivided local roadway to the west of Waiale Road with a posted speed limit of 20 mph. These three roads service the Waikapu Gardens Phase I residential neighborhood

Ohana Hana Loop is an east-west, two-way, two lane, undivided local roadway to the west of Waiale Road with a posted speed limit of 20 mph. Ohana Hana Loop extends from Waiale Road and services the Waikapu Gardens Phase II residential neighborhood.

Kaohu Street is an east-west, two-way, two lane, undivided local roadway on the northern side of the Project Site that extends from High Street to the west and ends at Waiale Road to the east, before turning into Oluloa Drive, to serve a residential subdivision. Kaohu Street provides access to various residential homes, various businesses and the Maui County Building.

Olomea Street is an east-west, two-way, two lane, undivided local roadway that services the Kehalani residential subdivision consisting of various single family and multi-family dwellings.

Kaupo Street is an east-west, two-way, two lane, undivided local roadway that services the Kehalani residential subdivision consisting of various single family and multi-family dwellings. Kaupo Street also provides northerly access to the Kehalani Village Center.

2.2 Existing Traffic Volumes

Intersection analysis within the study area was performed on the following intersections due to their proximity to the Project. The existing traffic volumes data utilized in this report were collected on Wednesday, March 15, 2017 and Thursday, March 16, 2017 with a few exceptions. The Waikapu Gardens Phase 1 with accesses along Waiale Road, was counted in October 2015. Since the development is fully built out, turning movements at these intersections are anticipated to remain the same. Three intersections along Waiale Road were counted on February 2018 at its intersections with Kaupo Street, Olomea Street and Kaohu Street/Oluloa Drive.

- Honoapiilani Highway/Kehalani Parkway (Signalized)
- Honoapiilani Highway/Kuikahi Drive (Signalized)
- Kuikahi Drive/Kehalani Village Center Driveway (Unsignalized)
- Waiale Road/Kuikahi Drive & Maui Lani Parkway (Signalized)
- Maui Lani Parkway/Kamehameha Avenue (Unsignalized)
- Waiale Road/Kaupo Street (Unsignalized)
- Waiale Road/Olomea Street (Unsignalized)
- Waiale Road/Waiinu Road (Unsignalized)
- Waiale Road/Kaohu Street & Oluloa Drive (Unsignalized)
- Honoapiilani Highway/Waiko Road (Signalized)
- Waiale Road/Waiko Road (Unsignalized)
- Waiale Road/Ohana Hana Loop (Unsignalized)
- Waiale Road/Nokekula Loop (Unsignalized)
- Waiale Road/Haawi Street (Unsignalized)
- Waiale Road/Kokololio Street (Unsignalized)

Based on the traffic count data, the weekday AM peak hour of traffic was determined to occur between 7:00 AM and 8:00 AM, while the weekday PM peak hour of traffic was determined to occur between 4:15 PM and 5:15 PM. The traffic count data is provided in Appendix A for the existing intersections studied.

2.3 Existing Traffic Conditions Analysis and Observations

Honoapiilani Highway/Kehalani Parkway is a signalized intersection with exclusive left-turn and right-turn lanes on all approaches. The channelized northbound and southbound right-turn movements also include exclusive eastbound and westbound receiving lanes, respectively. All movements at this intersection currently operate at LOS D or better during the AM and PM peak hours of traffic, except for the eastbound left-turn movement which operates at LOS E and near capacity conditions during the AM peak hour. For a portion of the AM peak hour, the eastbound

left-turn movement operates with queues that extend to or beyond the existing left-turn storage lane and some vehicles may require two cycle lengths to clear the intersection. Heavy traffic during a short period of time is reflective of typical school traffic conditions, as these queuing conditions were observed to last about 30 minutes during the AM peak hour, generally between 7:15-7:45 AM and primarily stem from traffic generated by the Puu Kukui Elementary School.

In addition, northbound traffic queues along Honoapiilani Highway were observed to primarily stem from Wailuku Elementary School. At Aupuni Street, northbound traffic queued back to Kehalani Parkway for about 5-10 minutes during the AM peak hour due to a police officer directing traffic at Aupuni Street to service Wailuku Elementary School traffic in the morning. The police officer is observed to stop mainline northbound and southbound traffic for as much as 30-40 seconds at a time, creating lengthy mainline queues. This impacted the vehicular progression through the Honoapiilani Highway/Kehalani Parkway intersection.

Honoapiilani Highway/Kuikahi Drive is a signalized intersection with exclusive left-turn and right-turn lanes on all approaches. The channelized northbound right-turn movement also includes an exclusive eastbound acceleration lane. All movements at this intersection currently operate at LOS C or better with no significant queueing observed during the AM and PM peak hours of traffic.

Honoapiilani Highway/Waiko Road is a signalized intersection with exclusive left-turn lanes on the northbound and southbound approaches, and exclusive right-turn lanes on the eastbound and southbound approaches. All movements at this intersection currently operate at LOS C or better with no significant delays or queuing during the AM and PM peak hours of traffic.

Kuikahi Drive/Kehalani Village Center Access is an unsignalized T-intersection with exclusive left-turns in the eastbound and southbound directions. All movements at this intersection currently operate at LOS B or better during the AM and PM peak hours of traffic with the exception of the southbound left-turn movement which operates at LOS D during both the AM and PM peak hours of traffic.

Waiale Road/Waiko Road is an unsignalized T-intersection with shared lanes on all approaches and the southbound approach stop-controlled. All movements at this intersection currently operate at LOS B or better with no significant delays or queues during the peak hours of traffic.

Waiale Road @ Ohana Hana Loop, Nokekula Loop, Haawi Street & Kokololio Street are unsignalized T-intersections servicing the Waikapu Gardens Phase I and II developments. All movements at these intersections currently operate at LOS B or better with no significant delays during the AM and PM peak hours of traffic.

Kamehameha Avenue/Maui Lani Parkway is a four-way stop controlled intersection with exclusive left-turn lanes on both approaches on Kamehameha Avenue and is located 700 feet northeast of Pomaikai Elementary School. Each approach includes flashing beacons with stop signs, and marked crosswalks are provided on the southwest leg of Kamehameha Avenue and the northwest leg of Maui Lani Parkway.

The northbound through/right-turn movement, southbound through/right-turn movement, eastbound approach, and westbound approach operate at LOS F with some overcapacity conditions during the AM and PM peak hours of traffic. This is primarily due to regional traffic between the Waikapu-Wailuku-Kahului regions. Queues were inconsistent and varied in length

throughout the peak hours, with a short period of extensive southbound queuing during the AM peak hour and periodic eastbound queuing during the AM and PM peak hours of traffic.

Waiale Road/Kaohu Street/Oluloa Drive is a four-way stop intersection with shared left-turn/through/right-turn lanes along Waiale Road and the westbound approach along Oluloa Drive. An exclusive left-turn lane and shared through/right-turn lane is provided along the eastbound approach on Kaohu Street.

Traffic was generally observed to progress unimpeded along Waiale Road during the AM peak hour, except between 7:30-7:50 AM, where southbound traffic on Waiale Road could queue back near to Wells Street. More critically, northbound traffic on Waiale Road was observed to slowly progress through the intersection. For a brief 5-10 minute period starting from 7:30AM, northbound traffic spilled back at varying lengths from this four-way stop to the upstream Waiale Road/Waiinu Road intersection, causing congestion that stretched back towards Kuikahi Drive. Operationally, the northbound and southbound approaches along Waiale Road operate at or over-capacity conditions with LOS F. Congestion and queuing along Waiale Road generally dissipated around 7:50-7:55 AM.

Various constraints limit options to implement mitigative measures to curb congestive conditions at this intersection and along Waiale Road. Based on the Four-Hour signal warrant in the Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition, a signal is currently not warranted based on existing traffic volumes. However, in the event traffic at the intersection increases in the future to warrant a signal, the installation of a traffic signal system will be difficult to implement given the existing alignment of the roadway and right-of-way constraints. The extent of the lanes along Waiale Road is currently adjacent to the westernmost limits of the Countys right-of-way. Some undeveloped right-of-way is available on the easternmost limits of the Countys right-of-way, so Waiale Road may need to be realigned to fit a traffic signal system at this intersection. Waiale Road may also require widening to provide exclusive left-turn lanes along Waiale Road, given the relatively high volume of through traffic along this corridor. A roundabout is likely infeasible due to the existing right-of-way constraints as well as the skewed approach from Oluloa Drive that inhibits perpendicular intersection approaches necessary for roundabouts. Mitigation to remove stop control along the Waiale Road approach (creating a two-way stop controlled intersection) will also be negatively impacted by the skewed approach from Oluloa Drive, making it difficult for vehicles along Oluloa Drive to detect approaching free flowing northbound vehicles along Waiale Road. Right-of-way acquisition may be needed to provide more space for the options of a traffic signal, roundabout, widening improvements and/or the realignments of Waiale Road and Oluloa Drive to provide perpendicular intersection approach angles.

Waiale Road/Waiinu Road is an unsignalized T-intersection the minor westbound approach of Waiinu Road stop-controlled. In both the AM and PM peak hours the westbound shared left-turn/through lane operates at LOS F and overcapacity conditions due to lengthy delays.

As noted above, northbound congestion spills back into this intersection from the Waiale Road/Kaohu Street/Oluloa Drive four-way stop intersection during portions of the AM peak hour, causing congestion that stretched back towards Kuikahi Drive. Northbound congestion is further impacted at this intersection due to a heavy northbound right-turn movement, which reduces northbound speeds and decreases progression along Waiale Road. Some northbound vehicles along Waiale Road also stopped within the through travel lane to allow southbound left-turn and westbound left-turn vehicles (ranging from 1-6 vehicles at a time) to turn onto or off of Waiale

Road, which contributed to the lengthy platoons. During the PM peak hour, traffic along Waiale Road operated smoothly, but queues continued to be observed along the westbound leg of Waiinu Road. Queues along the westbound approach also varies throughout the peak period, depending on gaps in traffic and the occurrence of throughput vehicles stopping within the through lane to allow westbound vehicles to turn onto Waiale Road.

The need for roadway widening and/or traffic control mitigations at this intersection were previously identified by various agencies, but has stalled due to right-of-way constraints from ownership of parcels by adjacent private landowners.

Waiale Road/Olomea Street is an unsignalized Tee-intersection with exclusive left-turn and right-turn lanes on all approaches. During the AM and PM peak hours of traffic, the eastbound left-turn movement operates at LOS F and overcapacity conditions. During the AM peak hour, due to northbound congestion along Waiale Road, observations indicated that some northbound vehicles along Waiale Road stopped within the through travel lane to allow eastbound left-turn vehicles to turn onto Waiale Road, which contributed to the northbound congestion. Based on a four-hour signal warrant, a signal may be warranted. However, as a temporary mitigative measure, a median refuge lane may help reduce eastbound left-turn vehicle delays by allowing vehicles to turn onto Waiale Road with a two-stage approach; turning left into the refuge lane after finding gaps in southbound traffic, then merging into the Waiale Road through lane after finding gaps in northbound traffic.

Waiale Road/Kaupo Street is an unsignalized Tee-intersection with exclusive left-turn and right-turn lanes along the Kaupo Street approach and shared northbound through/left-turn and shared southbound through-right-turn lanes along Waiale Road. Eastbound left-turn movements operate with relatively higher delays and LOS F(E) conditions during the AM(PM) peak hours. Similar to the Waiale Road/Olomea Street intersection, observations indicated that some northbound vehicles along Waiale Road stopped within the through travel lane to allow eastbound left-turn vehicles to turn onto Waiale Road, which contributed to the northbound congestion spilling back to Kuikahi Drive during the AM peak hour. An exclusive northbound left-turn lane or a median refuge lane may be considered to improve operations at this intersection and reduce vehicle spill back into Kuikahi Drive.

Waiale Road/Kuikahi Drive is a signalized intersection with exclusive left-turn lanes on all approaches and an exclusive right-turn lane on the westbound approach. All movements at this intersection currently operate at LOS D or better during the AM and PM peak hours of traffic. However, for about 20-30 minutes during the AM peak hour, vehicles were observed to queue beyond the length of the eastbound left-turn storage lane to the Kehalani Village Drive or as far as Honoapiilani Highway. These queues occur at variable lengths and are dependent on existing northbound queues that spill back from Waiale Road into the Waiale Road/Kuikahi Drive intersection, which limits full progression for eastbound left-turning vehicles.

Figure 2.1 illustrates the existing lane configuration, existing traffic volumes, and LOS for each study intersection. Table 2.1 summarizes the existing LOS at the study intersections. LOS worksheets are provided in Appendix C. Signal warrants are provided in Appendix D.

LEGEND

##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

X(X) – AM(PM) LOS

(Y) X/X – SIGNALIZED INTERSECTION Y, OVERALL AM/PM LOS

(X) – UNSIGNALIZED INTERSECTION X

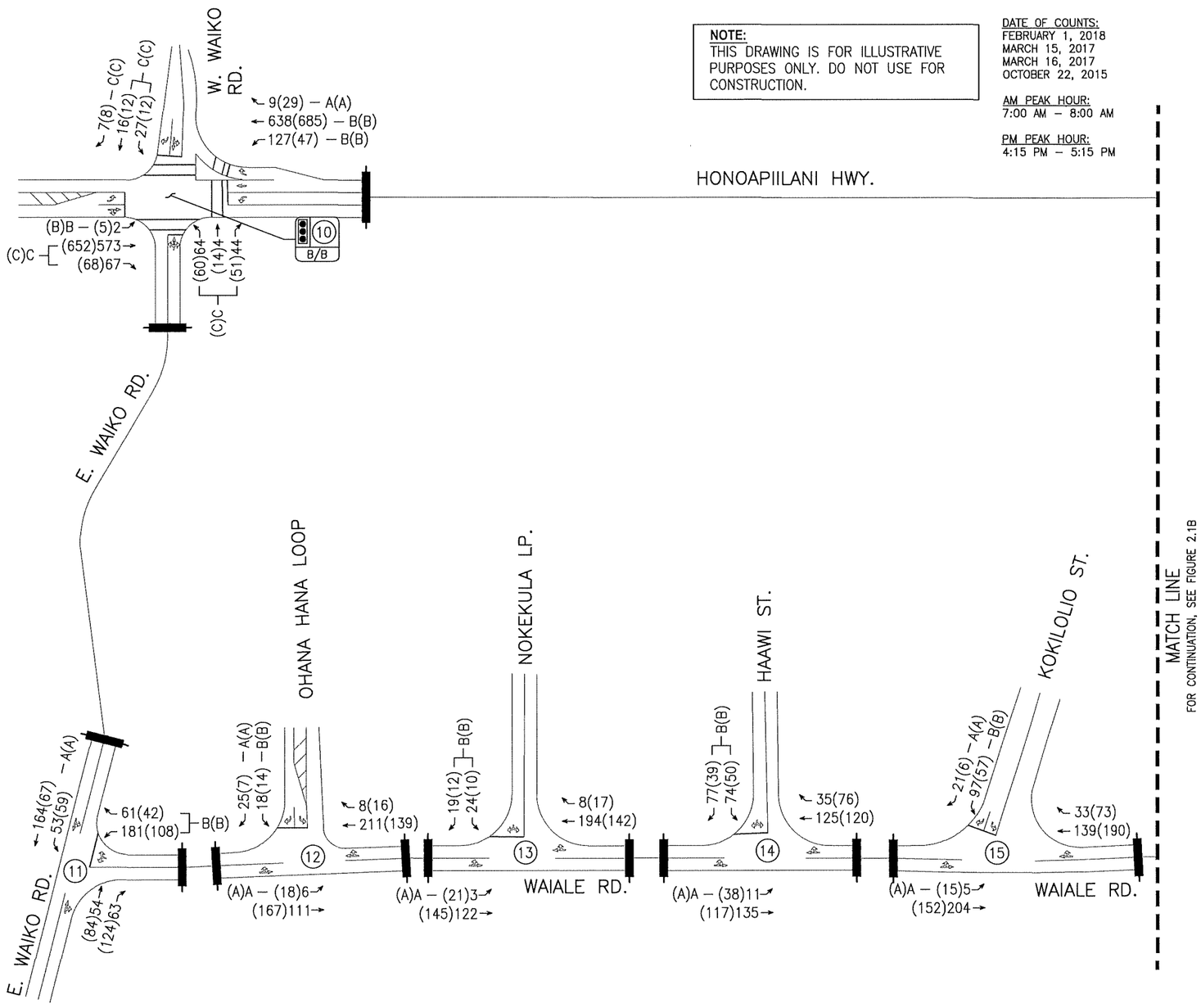
NOTE:
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DATE OF COUNTS:
FEBRUARY 1, 2018
MARCH 15, 2017
MARCH 16, 2017
OCTOBER 22, 2015

AM PEAK HOUR:
7:00 AM – 8:00 AM

PM PEAK HOUR:
4:15 PM – 5:15 PM

NORTH
NOT TO SCALE

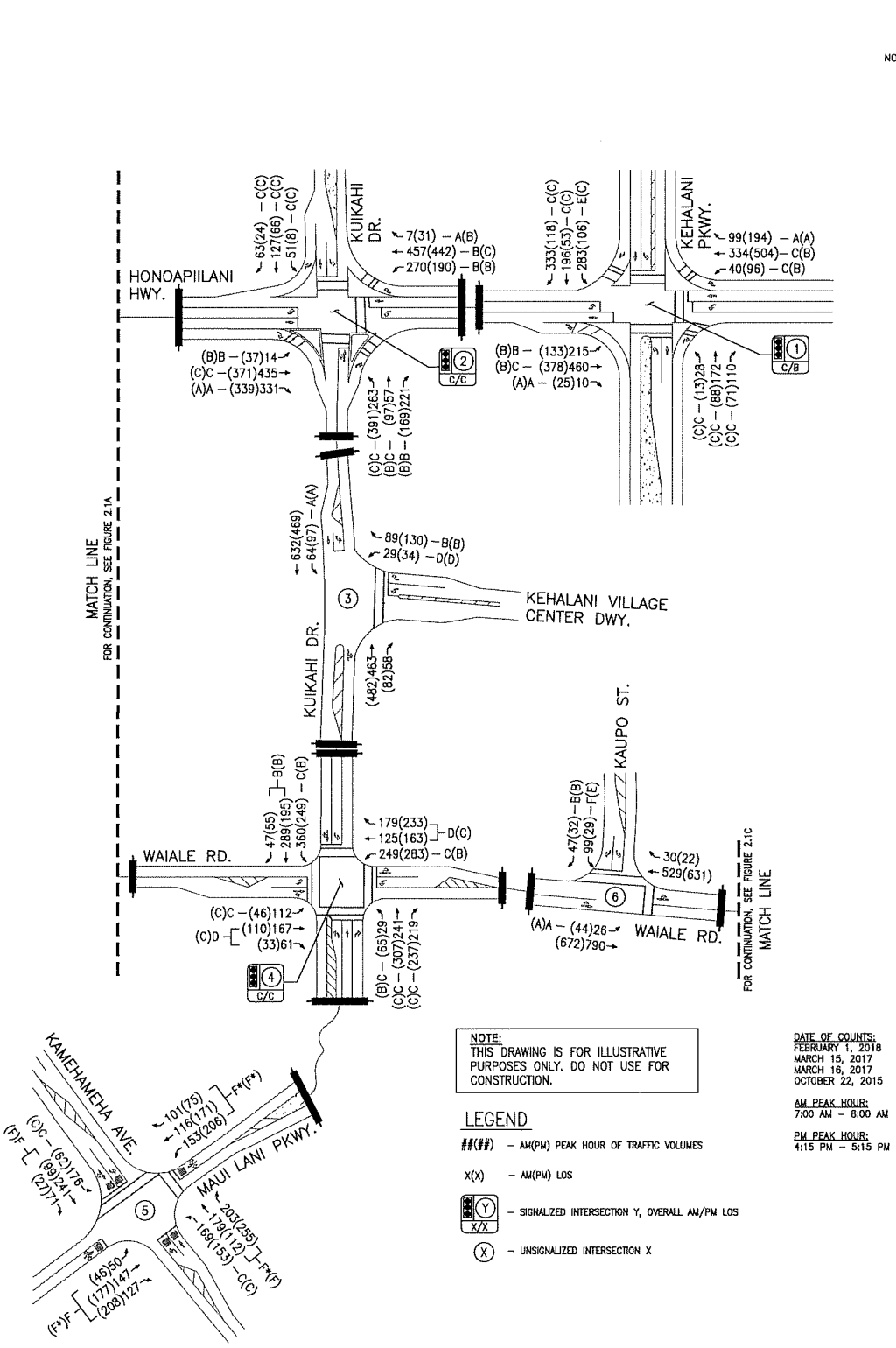


WAILUKU APARTMENTS

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EXISTING LANEAGE, VOLUMES AND LOS

FIGURE
2.1A



WAILUKU APARTMENTS

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ENGINEERS, SURVEYORS • HONOLULU, HAWAII

EXISTING LANEAGE, VOLUMES AND LOS

FIGURE 2.1B

LEGEND

##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

X(X) – AM(PM) LOS

(Y) X/X – SIGNALIZED INTERSECTION Y, OVERALL AM/PM LOS

(X) – UNSIGNALIZED INTERSECTION X

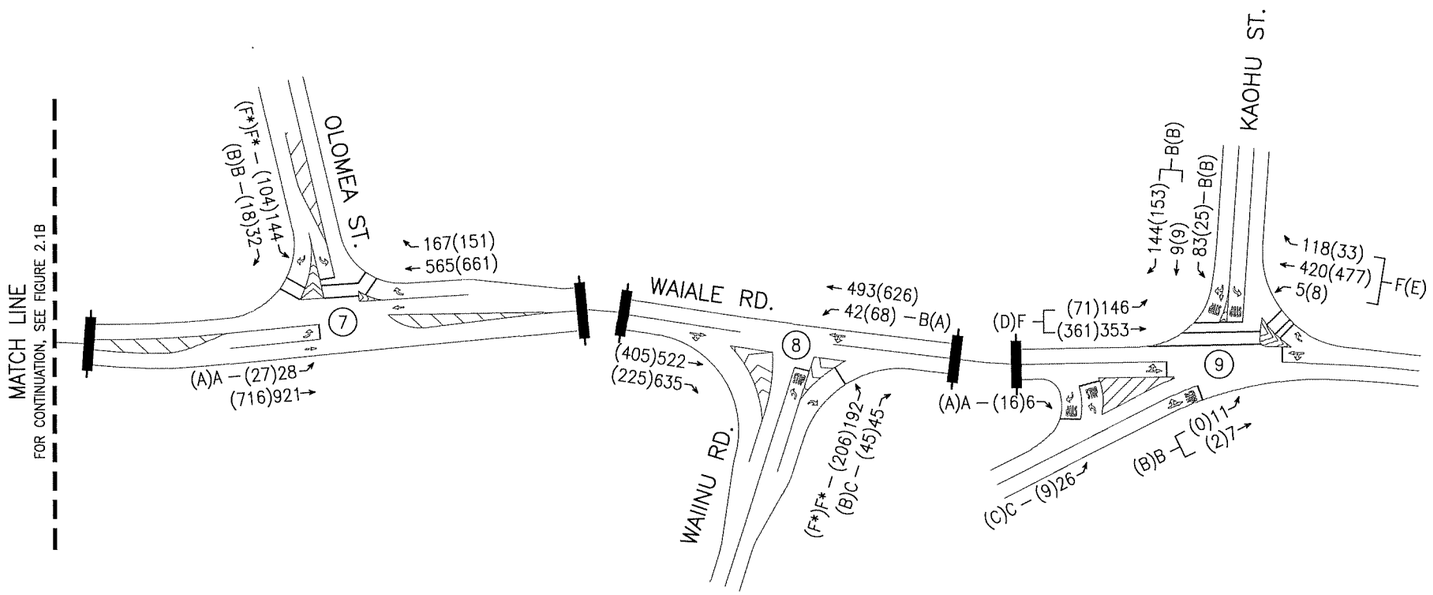
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THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY. DO NOT USE FOR CONSTRUCTION.

DATE OF COUNTS:
FEBRUARY 1, 2018
MARCH 15, 2017
MARCH 16, 2017
OCTOBER 22, 2015

AM PEAK HOUR:
7:00 AM – 8:00 AM

PM PEAK HOUR:
4:15 PM – 5:15 PM

NORTH
NOT TO SCALE



WAILUKU APARTMENTS	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII	FIGURE
	EXISTING LANEAGE, VOLUMES AND LOS	2.1C

Table 2.1: Existing 2017 Level of Service Summary

Intersection	Existing Conditions					
	AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
1: Honoapiilani Hwy & Kehalani Pkwy						
NB LT	17.9	0.59	B	12.0	0.39	B
NB TH	26.6	0.77	C	15.5	0.55	B
NB RT	0.0	0.00	A	0.0	0.00	A
EB LT	59.2	0.97	E	22.0	0.39	C
EB TH	21.6	0.38	C	22.5	0.20	C
EB RT	30.6	0.77	C	24.2	0.52	C
WB LT	27.4	0.12	C	24.5	0.05	C
WB TH	33.8	0.75	C	27.7	0.58	C
WB RT	32.2	0.57	C	27.7	0.55	C
SB LT	20.0	0.17	C	10.5	0.23	B
SB TH	29.7	0.72	C	19.3	0.75	B
SB RT	0.0	0.00	A	0.0	0.00	A
Overall	32.5	-	C	18.8	-	B
2: Honoapiilani Highway & Kuikahi Drive						
NB LT	16.1	0.04	B	17.6	0.14	B
NB TH	26.8	0.78	C	27.0	0.75	C
NB RT	0.0	0.00	A	0.0	0.00	A
EB LT	27.7	0.19	C	28.3	0.04	C
EB TH	33.7	0.70	C	30.3	0.40	C
EB RT	29.9	0.37	C	27.7	0.13	C
WB LT	23.6	0.65	C	23.7	0.72	C
WB TH	22.0	0.15	C	17.4	0.18	B
WB RT	17.4	0.42	B	13.4	0.28	B
SB LT	17.8	0.70	B	15.8	0.55	B
SB TH	16.4	0.60	B	21.4	0.70	C
SB RT	9.6	0.01	A	13.8	0.06	B
Overall	21.9	-	C	21.7	-	C
3: Kuikahi Dr & Kehalani Village Center Dr						
EB LT	8.8	0.1	A	9.2	0.1	A
SB LT	34.8	0.2	D	33.9	0.2	D
SB RT	13.0	0.2	B	14.4	0.3	B
4: Waiale Rd & Kuikahi Dr/Maui Lani Pkwy						
NB LT	24.7	0.42	C	23.2	0.23	C
NB TH/RT	35.4	0.80	D	27.3	0.53	C
EB LT	22.1	0.81	C	17.6	0.65	B
EB TH/RT	18.1	0.51	B	18.3	0.46	B
WB LT	23.9	0.10	C	18.7	0.17	B
WB TH	31.8	0.72	C	27.5	0.77	C
WB RT	33.6	0.78	C	26.4	0.71	C
SB LT	24.4	0.68	C	19.7	0.61	B
SB TH/RT	36.1	0.81	D	34.2	0.87	C
Overall	27.6	-	C	24.8	-	C
5: Kamehameha Ave & Maui Lani Pkwy						
NB LT	24.5	0.55	C	15.9	0.20	C
NB TH/RT	53.9	0.90	F	18.2	0.38	C
EB LT/TH/RT	82.3	1.03	F*	109.2	1.11	F*
WB LT/TH/RT	57.4	0.93	F	76.9	1.05	F*
SB LT	23.0	0.52	C	19.1	0.44	C
SB TH/RT	88.0	1.06	F*	51.9	0.93	F

* Denotes overcapacity condition, v/c ≥ 1.

Table 2.1: Existing 2017 Level of Service Summary Cont'd

Intersection	Existing Conditions					
	AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
6: Waiale Rd & Kaupo St						
NB LT	8.8	0.03	A	9.3	0.05	A
EB LT	110.5	0.85	F	46.3	0.27	E
EB RT	12.9	0.10	B	13.9	0.08	B
7: Waiale Rd & Olomea St						
NB LT	9.5	0.04	A	9.9	0.04	A
EB LT	513.5	1.86	F*	190.8	1.09	F*
EB RT	14.0	0.08	B	14.9	0.05	B
8: Waiale Rd & Waiinu Rd						
WB LT	485.7	1.86	F*	378.8	1.65	F*
WB RT	17.7	0.15	C	12.5	0.09	B
SB LT	12.1	0.08	B	9.3	0.08	A
9: Waiale Rd & Kaohu St/Oluloa Dr						
NB LT/TH	61.4	0.99	F	27.9	0.79	D
NB RT	8.6	0.01	A	8.2	0.03	A
EB LT	13.3	0.21	B	11.1	0.06	B
EB TH/RT	13.5	0.33	B	12.7	0.33	B
WB LT	24.0	0.13	C	22.3	0.05	C
WB TH/RT	12.3	0.05	B	10.7	0.00	B
SB LT/TH/RT	75.7	1.04	F*	46.4	0.93	E
10: Honoapiilani Hwy & W Waiko Rd/E Waiko Rd						
NB LT	10.4	0.01	B	10.9	0.02	B
NB TH/RT	20.2	0.72	C	21.8	0.83	C
EB LT/TH	28.2	0.12	C	24.4	0.06	C
EB RT	27.6	0.03	C	24.2	0.03	C
WB LT/TH/RT	30.1	0.34	C	26.4	0.34	C
SB LT	11.3	0.33	B	12.6	0.16	B
SB TH	12.5	0.60	B	13.8	0.69	B
SB RT	6.4	0.01	A	7.1	0.04	A
Overall	17.2	-	B	18.3	-	B
11: E Waiko Rd & Waiale Rd						
SB LT/RT	14.2	0.40	B	12.1	0.25	B
12: Waiale Rd & Ohana Hana Loop						
NB TH	7.7	0.01	A	7.6	0.01	A
EB TH	10.9	0.03	B	11.1	0.03	B
WB LT/RT	9.6	0.03	A	9.1	0.01	A
13: Waiale Rd & Nokekula Lp						
NB LT	7.7	0.00	A	7.6	0.02	A
EB LT/RT	10.4	0.07	B	10.0	0.03	B
14: Waiale Rd & Haawi St						
NB LT	7.6	0.01	A	7.7	0.03	A
EB LT/RT	11.0	0.22	B	11.0	0.14	B
15: Waiale Rd & Kokololio St						
NB LT	7.6	0.00	A	7.9	0.01	A
EB LT	12.2	0.18	B	12.2	0.11	B
EB RT	9.2	0.03	A	9.6	0.01	A

* Denotes overcapacity condition, v/c ≥ 1.

3. BASE YEAR 2021 TRAFFIC CONDITIONS

3.1 Defacto Growth Rate

Projections for Base Year 2021 traffic were based upon existing traffic counts performed by ATA, the Maui Regional Travel Demand Model (MRTDM) growth for forecast years of 2021 and 2035, and nearby developments in the immediate vicinity of the Project. The resulting growth rate along study roadways was approximately 1.9 percent per year.

3.2 Traffic Forecasts for Known Developments

By year 2021, the following developments shown in Figure 3.1 and Table 3.1 may be constructed. Appendix E shows the general trip distribution/assignment percentages associated with each development either based on existing traffic patterns or their respective Project TIAR's. The Kehalani Village Center and Maui Lani Village Center are currently occupied and ongoing developments with associated growth assumptions described in Table 3.1 below.

Trips generated by the master planned communities for the Kehalani and Maui Lani residential developments are accounted for in the MRTDM growth. It was assumed that the Puunani Residences and Waiale Development developments are unlikely to be built by Year 2021, given their current statuses in the permitting process, and were therefore not explicitly included in this TIAR. Waikapu Country Town (WCT) is also still in the entitlements process and full build-out will not occur by Year 2021, however to remain conservative, the Project's initial residential phase was included in this TIAR.

- **Waikapu Light Industrial Project** - Proposed 8.5-acre industrial development along Waiko Road. Forecast traffic growth generated by this development was obtained from the Project's TIAR dated April 2013 and was added to the roadway network.

- **Waiko Baseyard Light Industrial Development** - Proposed industrial development along Waiko Road that will include 7.8 acres of commercial space and 16.5 acres of light industrial uses. Forecast traffic growth generated by this development was obtained from the Project's TIAR dated May 2011 and was added to the roadway network.

- **Central Maui Regional Sports Complex (CMRSC)** – Proposed regional park development, located south of the Maui Lani Parkway and Kamehameha Avenue intersection. Forecast traffic growth generated by this development was obtained from the Project's TIAR dated May 2014 and was added to the roadway network.

- **Kehalani Village Center** – Existing retail center in the Kehalani subdivision. Currently occupied by Longs Drugs, Foodland, Foodland Gas, American Savings Bank, Coffee Bean Tea & Leaf and McDonalds. The forecast AM and PM peak hour trips for the remaining development was estimated based on current forecasts and was added to the roadway network.

- **Maui Lani Village Center** – Existing retail center in the Maui Lani subdivision. Currently occupied by Walgreen and a mix of various commercial, office and warehouse land uses. Based on the latest projections, approximately 5,500 SF of commercial, 14,800 SF of office and 100,000 SF of warehouse space may be completed by year 2021. The

forecast AM and PM peak hour trips were generated based on the cumulative ITE Trip generation and added to the roadway network.

- **Waiale Affordable Housing** – Proposed 70-unit single-family residential subdivision and a neighborhood park. It will be located adjacent to the Valley Isle Fellowship Church along Waiale Road. An existing gated access to the project is located along Waiale Road and was assumed to be the primary access to the subdivision. The forecast AM and PM peak hour trips were obtained from the Project's TIAR dated 2015 and was added to the roadway network.

- **Kehalani Mauka** – Existing residential subdivision located north of Kuikahi Drive and west of Honoapiilani Highway. Currently partially developed with residential homes and the Puu Kukui Elementary School. Based on the latest projections, approximately 246 single-family homes and 138 duplex units may be completed by year 2021. The Kehalani Mauka Parkway Loop is also anticipated to be completed by year 2021 and was assumed in the analysis.

- **Waikapu Country Town** – This future development is currently going through the entitlement process to obtain permits for construction. For purposes of this TIAR, it's assumed that permit approval and infrastructure construction will be complete by Year 2021 and the initial phase that includes 150 single-family residential units (identified in the Project's EIS) will be constructed and occupied.

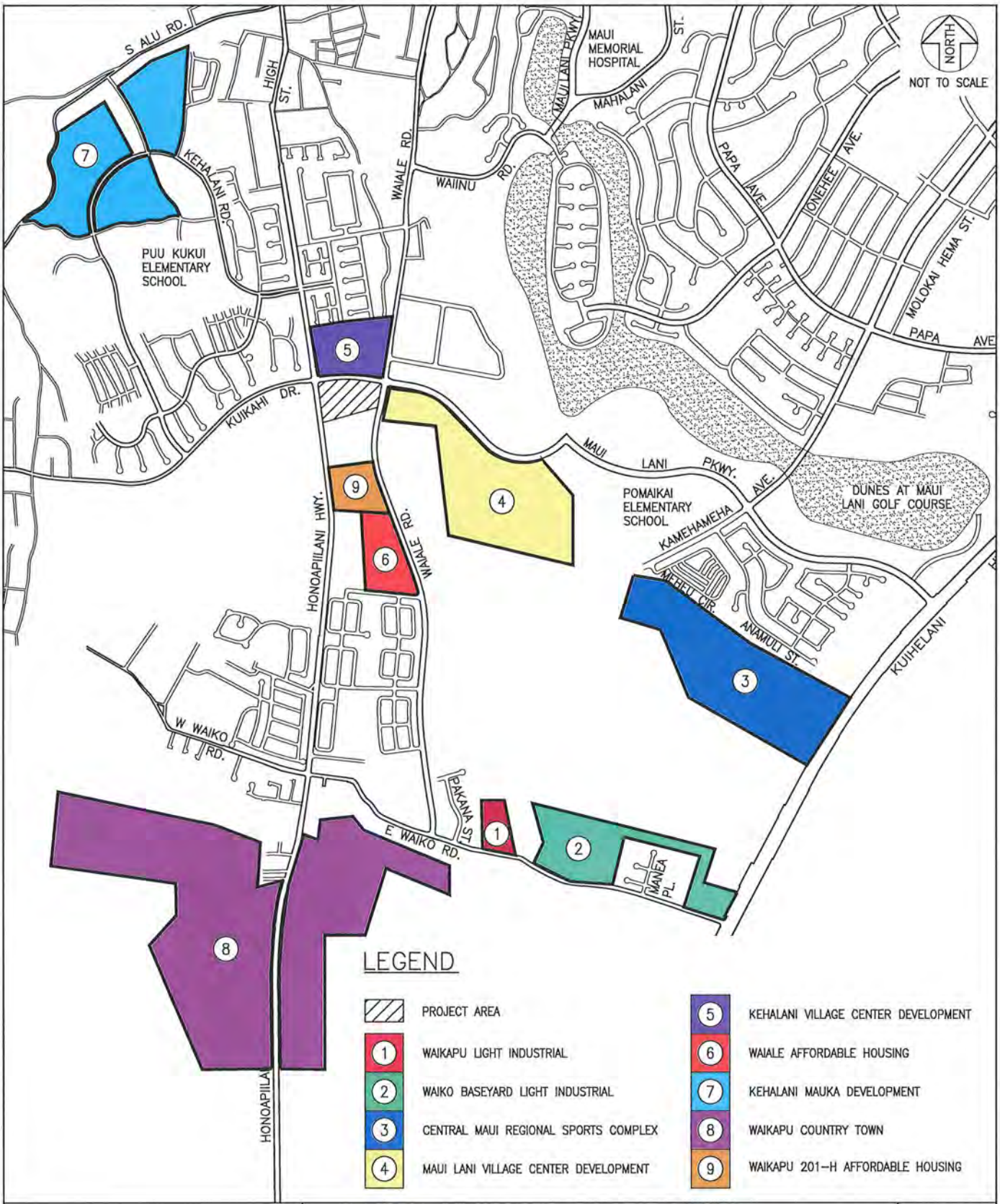
- **Waikapu 201-H Affordable Housing** – Proposed residential subdivision with approximately 68 single-family units and 12 multi-family units north of the proposed Waiale Affordable Housing project. The forecast AM and PM peak hour trips were obtained from the Project's TIAR dated 2018 and was added to the roadway network.

Table 3.1: Total Trips Generated by Known Developments in Project Vicinity [1]

Known Development	Land Use	Units	AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Waikapu Light Industrial Project	Industrial Park	8.5 Acres	74	15	89	21	79	100
Waiko Baseyard Light Industrial Development	Light Industrial, Retail	19.7 Acres, 100,000 SF	219	86	305	220	351	571
Central Maui Regional Sports Complex	County Park, Soccer Complex	13 Acres, 12 Fields	9	6	15	144	71	215
Kehalani Village Center [2]	Commercial	34,000 SF	10	7	17	70	75	145
Maui Lani Village Center (formerly VMX) [3]	Commercial, Office, Warehouse	120,000 SF	121	28	149	57	132	189
Waiale Affordable Housing	Single-Family Residential	70 Units	15	44	59	49	28	77
Kehalani Mauka [4]	Single-Family, Multi-Family Residential	246 SF 138 MF	57	192	249	202	114	316
Waikapu Country Town [5]	Single-Family Residential	150 SF	28	84	112	95	56	150
Waikapu 201-H Affordable Housing	Single-Family, Multi-Family Residential	68 SF 12 MF	17	51	68	54	32	86

Note:

1. Table 3.1 shows trips generated by known developments in the vicinity of the Project. Not all traffic generated by these developments travel through the study area of this TIAR, since some traffic will be routed to various roadways and intersections that were not included in this TIAR. See Appendix E for more detailed assessment of trip distribution/assignment patterns.
2. Kehalani Village Center partially completed with 64,730 SF of occupied space with Longs Drugs, Foodland, Foodland Gas and McDonalds. Trips shown, accounts for additional 34,000 SF of commercial space completed by Year 2021.
3. Maui Lani Village Center projections based on latest assumptions for growth. Majority of expansion attributed to lower trip generating office and warehouse land uses.
4. Kehalani Mauka projections based on latest assumptions for growth.
5. Initial residential phase as identified in the Waikapu Country Town Final EIS dated December 2016, assumed to be completed by Year 2021.



WAILUKU APARTMENTS

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FIGURE 3.1

BACKGROUND DEVELOPMENTS IN PROJECT VICINITY

3.3 Planned Roadway Projects

The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, since they are unlikely to be built by Year 2021 given their current status, these roadway improvements were not included in this TIAR. In addition, at the Waiale Road/Waiinu Road intersection, a traffic signal and widening improvements are listed in the Statewide Transportation Improvement Program (STIP). However, it's unknown if this improvement will be constructed by Year 2021 and was therefore not included in this TIAR. At the Maui Lani Parkway/Kamehameha Avenue intersection, a single-lane roundabout is planned to be constructed and was included in this TIAR.

3.4 Base Year 2021 Analysis

At the Honoapiilani Highway/Kehalani Parkway intersection, the eastbound left-turn movement will continue to operate at over-capacity and LOS F conditions during the AM peak hour. As noted in Section 2.3, heavy traffic during a short period of time is reflective of typical school traffic conditions, as these queuing conditions were observed to last about 30 minutes during the AM peak hour and primarily stem from traffic generated by the Puu Kukui Elementary School. There are currently no identified or planned roadway improvements likely to occur at this intersection. Signal timing may be adjusted, but northbound congestion along Honoapiilani Highway will continue to occur during the AM peak hour.

The southbound left-turn movement at the Kuikahi Drive/Kehalani Village Center Driveway will worsen to operate at LOS F during the AM and PM peak hours of traffic, however will continue to operate with relatively low volume at 30(45) vehicles in the AM(PM) peak hours of traffic.

Since no roadway improvements are planned to occur at the Waiale Road/Waiinu Road intersection, the westbound left-turn movement will continue operating at LOS F and overcapacity conditions during the AM and PM peak hours. In addition, since no roadway improvements are planned to occur at the Waiale Road/Kaupo Street intersection, Waiale Road/Olomea Street intersection (signal warranted under Existing Conditions) and Waiale Road/Kaohu Street intersection, LOS E/F and various over-capacity conditions are expected to continue operating similar to existing conditions. Based on the four-hour signal warrant at the Waiale Road/Kaohu Street intersection, a signal may be warranted for Base Year 2021 conditions. However, as discussed in Section 2.3, various issues related to right-of-way constraints, roadway alignment and skewed roadway approach from Oluloa Drive will make it difficult to construct a traffic signal or roundabout at this intersection.

For future planning purposes at the above Waiale Road intersections, roadway improvements at the Waiale Road/Waiinu Road intersection (as identified on the STIP), exclusive mainline left-turn storage lanes and/or median refuge lanes along Waiale Road could be considered to help mitigate Waiale Road northbound flows in the AM peak hour of traffic.

Figure 3.2 illustrates the Base Year 2021 forecast traffic volumes and LOS for the study intersection movements. Table 3.2 summarizes the Base Year 2021 LOS at the study intersections compared to existing conditions. LOS worksheets are provided in Appendix C.

LEGEND

##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

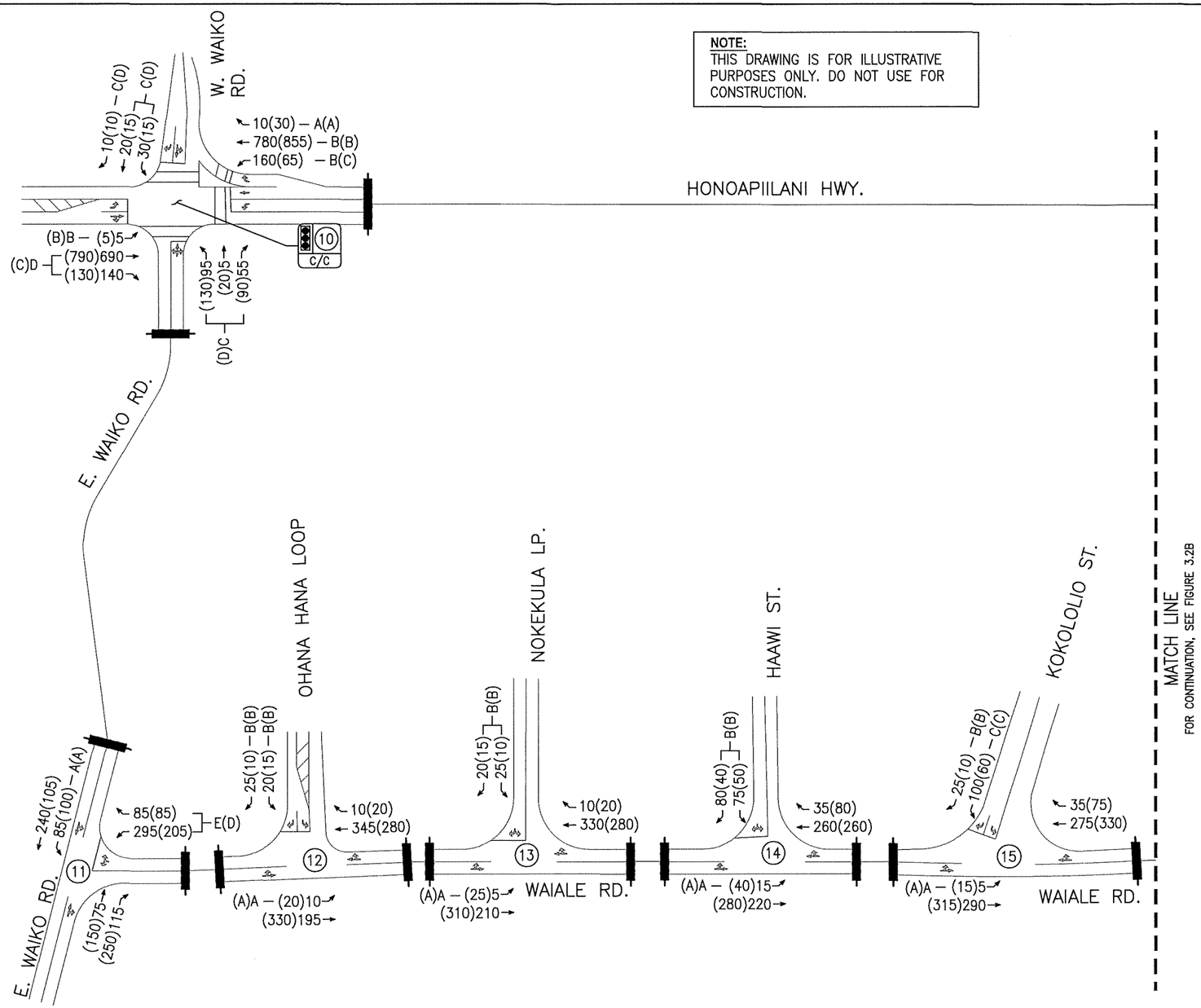
X(X) – AM(PM) LOS

(Y) X/X – SIGNALIZED INTERSECTION Y, OVERALL AM/PM LOS

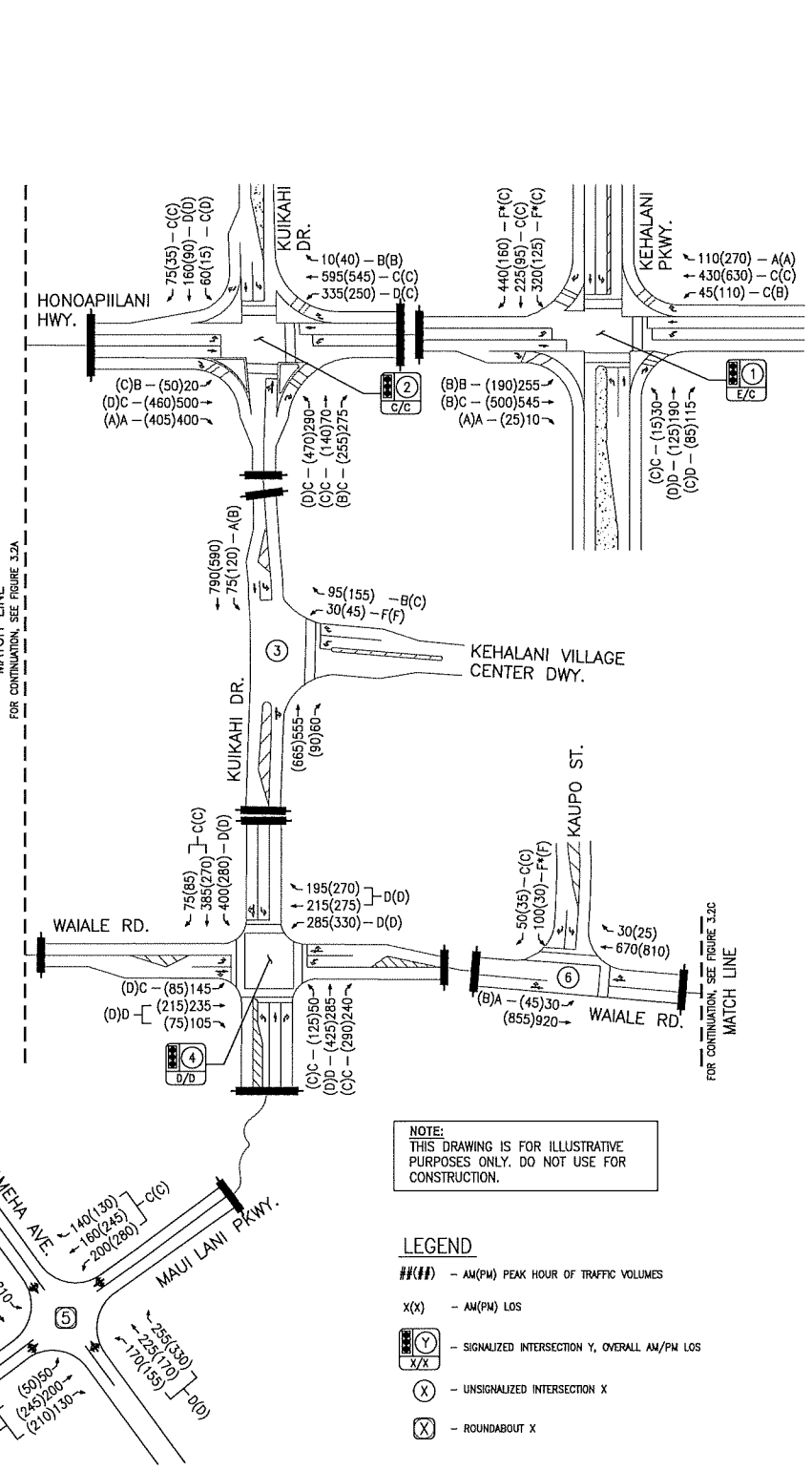
(X) – UNSIGNALIZED INTERSECTION X

NOTE:
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NORTH
NOT TO SCALE



WAILUKU APARTMENTS	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII	FIGURE
	BASE YEAR 2021 LANEAGE, VOLUMES AND LOS	3.2A



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	BASE YEAR 2021 LANEAGE, VOLUMES AND LOS	3.2B

LEGEND

##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

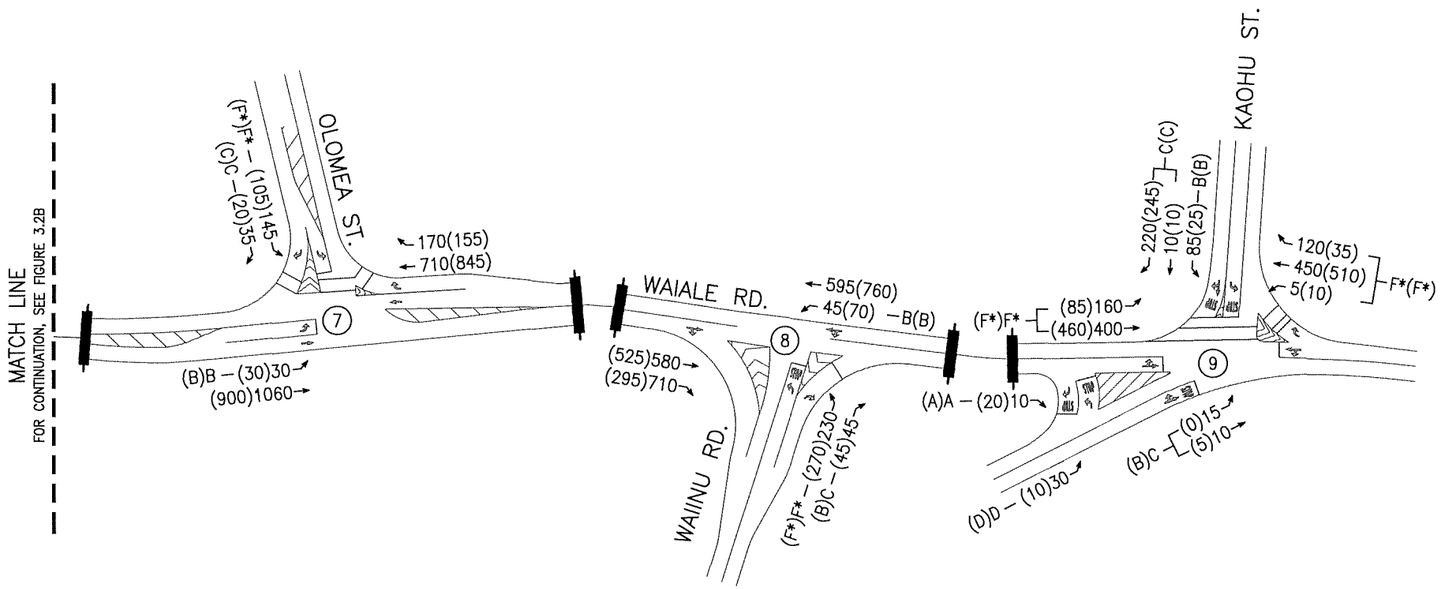
X(X) – AM(PM) LOS

(Y) X/X – SIGNALIZED INTERSECTION Y, OVERALL AM/PM LOS

(X) – UNSIGNALIZED INTERSECTION X

NOTE:
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NORTH
NOT TO SCALE



WAILUKU APARTMENTS	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII	FIGURE
	BASE YEAR 2021 LANEAGE, VOLUMES AND LOS	3.2C

Table 3.2: Existing and Base Year 2021 Level of Service Summary

Intersection	Existing Conditions						Base Year 2021					
	AM			PM			AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
1: Honoapiilani Hwy & Kehalani Pkwy												
NB LT	17.9	0.59	B	12.0	0.39	B	19.9	0.72	B	16.7	0.63	B
NB TH	26.6	0.77	C	15.5	0.55	B	27.8	0.79	C	17.9	0.63	B
NB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
EB LT	59.2	0.97	E	22.0	0.39	C	162.9	1.25	F*	26.5	0.49	C
EB TH	21.6	0.38	C	22.5	0.20	C	26.6	0.47	C	27.9	0.31	C
EB RT	30.6	0.77	C	24.2	0.52	C	98.7	1.08	F*	30.2	0.61	C
WB LT	27.4	0.12	C	24.5	0.05	C	30.9	0.14	C	30.2	0.07	C
WB TH	33.8	0.75	C	27.7	0.58	C	38.7	0.79	D	35.4	0.70	D
WB RT	32.2	0.57	C	27.7	0.55	C	36.2	0.57	D	34.2	0.56	C
SB LT	20.0	0.17	C	10.5	0.23	B	20.7	0.19	C	12.7	0.30	B
SB TH	29.7	0.72	C	19.3	0.75	B	32.6	0.79	C	28.4	0.86	C
SB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
Overall	32.5	-	C	18.8	-	B	61.4	-	E	24.6	-	C
2: Honoapiilani Highway & Kuikahi Drive												
NB LT	16.1	0.04	B	17.6	0.14	B	18.4	0.09	B	20.9	0.23	C
NB TH	26.8	0.78	C	27.0	0.75	C	34.3	0.85	C	42.5	0.88	D
NB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
EB LT	27.7	0.19	C	28.3	0.04	C	31.0	0.22	C	35.3	0.08	D
EB TH	33.7	0.70	C	30.3	0.40	C	43.6	0.78	D	39.7	0.66	D
EB RT	29.9	0.37	C	27.7	0.13	C	33.5	0.38	C	34.5	0.21	C
WB LT	23.6	0.65	C	23.7	0.72	C	31.8	0.75	C	37.8	0.87	D
WB TH	22.0	0.15	C	17.4	0.18	B	24.9	0.17	C	21.1	0.25	C
WB RT	17.4	0.42	B	13.4	0.28	B	20.1	0.51	C	15.8	0.39	B
SB LT	17.8	0.70	B	15.8	0.55	B	46.6	0.93	D	28.0	0.78	C
SB TH	16.4	0.60	B	21.4	0.70	C	22.4	0.75	C	29.7	0.80	C
SB RT	9.6	0.01	A	13.8	0.06	B	10.2	0.01	B	15.1	0.07	B
Overall	21.9	-	C	21.7	-	C	31.1	-	C	31.7	-	C
3: Kuikahi Dr & Kehalani Village Center Dr												
EB LT	8.8	0.07	A	9.2	0.11	A	9.3	0.09	A	10.3	0.16	B
SB LT	34.8	0.21	D	33.9	0.23	D	59.9	0.34	F	88.2	0.56	F
SB RT	13.0	0.18	B	14.4	0.27	B	14.6	0.22	B	20.4	0.42	C

* Denotes overcapacity condition, v/c ≥ 1.

Table 3.2: Existing and Base Year 2021 Level of Service Summary Cont'd

Intersection	Existing Conditions						Base Year 2021					
	AM			PM			AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
4: Waiale Rd & Kuikahi Dr/Maui Lani Pkwy												
NB LT	24.7	0.42	C	23.2	0.23	C	32.9	0.58	C	35.3	0.51	D
NB TH/RT	35.4	0.80	D	27.3	0.53	C	48.1	0.87	D	39.6	0.70	D
EB LT	22.1	0.81	C	17.6	0.65	B	45.0	0.94	D	40.9	0.86	D
EB TH/RT	18.1	0.51	B	18.3	0.46	B	27.6	0.68	C	30.1	0.60	C
WB LT	23.9	0.10	C	18.7	0.17	B	32.3	0.19	C	25.9	0.37	C
WB TH	31.8	0.72	C	27.5	0.77	C	48.5	0.85	D	47.5	0.88	D
WB RT	33.6	0.78	C	26.4	0.71	C	34.7	0.10	C	29.5	0.16	C
SB LT	24.4	0.68	C	19.7	0.61	B	44.0	0.85	D	36.7	0.82	D
SB TH/RT	36.1	0.81	D	34.2	0.87	C	37.1	0.78	D	42.3	0.90	D
Overall	27.6	-	C	24.8	-	C	40.1	-	D	38.8	-	D
5: Kamehameha Ave & Maui Lani Pkwy												
NB LT	24.5	0.55	C	15.9	0.20	C	-	-	-	-	-	-
NB TH/RT	53.9	0.90	F	18.2	0.38	C	-	-	-	-	-	-
NB LT/TH/RT	-	-	-	-	-	-	25.7	0.81	D	14.4	0.52	B
EB LT/TH/RT	82.3	1.03	F*	109.2	1.11	F*	15.9	0.66	C	22.3	0.80	C
WB LT/TH/RT	57.4	0.93	F	76.9	1.05	F*	19.0	0.65	C	22.3	0.75	C
SB LT	23.0	0.52	C	19.1	0.44	C	-	-	-	-	-	-
SB TH/RT	88.0	1.06	F*	51.9	0.93	F	-	-	-	-	-	-
SB LT/TH/RT	-	-	-	-	-	-	31.8	0.88	D	25.2	0.83	D
6: Waiale Rd & Kaupo St												
NB LT	8.8	0.03	A	9.3	0.05	A	9.4	0.04	A	10.1	0.07	B
EB LT	110.5	0.85	F	46.3	0.27	E	323.2	1.38	F*	109.2	0.51	F
EB RT	12.9	0.10	B	13.9	0.08	B	15.0	0.13	C	16.9	0.11	C
7: Waiale Rd & Olomea St												
NB LT	9.5	0.04	A	9.9	0.04	A	10.2	0.05	B	10.9	0.05	B
EB LT	513.5	1.86	F*	190.8	1.09	F*	1111.1	3.09	F*	658.2	2.08	F*
EB RT	14.0	0.08	B	14.9	0.05	B	16.4	0.11	C	18.2	0.07	C
8: Waiale Rd & Waiinu Rd												
WB LT	485.7	1.86	F*	378.8	1.65	F*	1106.5	3.21	F*	1267.5	3.58	F*
WB RT	17.7	0.15	C	12.5	0.09	B	20.0	0.17	C	14.7	0.12	B
SB LT	12.1	0.08	B	9.3	0.08	A	13.2	0.10	B	10.3	0.10	B

Table 3.2: Existing and Base Year 2021 Level of Service Summary Cont'd

Intersection	Existing Conditions						Base Year 2021					
	AM			PM			AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
9: Waiale Rd & Kaohu St/Oluloa Dr												
NB LT/TH	61.4	0.99	F	27.9	0.79	D	135.8	1.25	F*	94.1	1.11	F*
NB RT	8.6	0.01	A	8.2	0.03	A	9.5	0.02	A	9.0	0.04	A
EB LT	13.3	0.21	B	11.1	0.06	B	14.5	0.24	B	11.9	0.07	B
EB TH/RT	13.5	0.33	B	12.7	0.33	B	18.6	0.55	C	18.4	0.57	C
WB LT	24.0	0.13	C	22.3	0.05	C	30.8	0.19	D	30.0	0.07	D
WB TH/RT	12.3	0.05	B	10.7	0.00	B	15.2	0.17	C	13.1	0.04	B
SB LT/TH/RT	75.7	1.04	F*	46.4	0.93	E	138.6	1.25	F*	102.1	1.14	F*
10: Honoapiilani Hwy & W Waiko Rd/E Waiko Rd												
NB LT	10.4	0.01	B	10.9	0.02	B	12.1	0.02	B	13.9	0.02	B
NB TH/RT	20.2	0.72	C	21.8	0.83	C	39.8	0.96	D	33.9	0.93	C
EB LT/TH	28.2	0.12	C	24.4	0.06	C	28.2	0.15	C	36.5	0.10	D
EB RT	27.6	0.03	C	24.2	0.03	C	27.5	0.03	C	36.1	0.03	D
WB LT/TH/RT	30.1	0.34	C	26.4	0.34	C	31.7	0.49	C	48.4	0.77	D
SB LT	11.3	0.33	B	12.6	0.16	B	19.3	0.63	B	23.6	0.31	C
SB TH	12.5	0.60	B	13.8	0.69	B	16.4	0.74	B	17.0	0.76	B
SB RT	6.4	0.01	A	7.1	0.04	A	6.6	0.01	A	7.0	0.03	A
Overall	17.2	-	B	18.3	-	B	27.8	-	C	28.1	-	C
11: E Waiko Rd & Waiale Rd												
EB LT	7.6	0.04	A	7.8	0.05	A	7.8	0.07	A	8.5	0.10	A
SB LT/RT	14.2	0.40	B	12.1	0.25	B	39.5	0.84	E	28.1	0.68	D
12: Waiale Rd & Ohana Hana Loop												
NB LT	7.7	0.01	A	7.6	0.01	A	8.1	0.01	A	8.0	0.02	A
EB LT	10.9	0.03	B	11.1	0.03	B	13.4	0.05	B	14.7	0.04	B
EB RT	9.6	0.03	A	9.1	0.01	A	10.6	0.04	B	10.0	0.02	B
13: Waiale Rd & Nokekula Lp												
NB LT	7.7	0.00	A	7.6	0.02	A	8.0	0.01	A	8.0	0.02	A
EB LT/RT	10.4	0.07	B	10.0	0.03	B	12.4	0.09	B	12.0	0.05	B
14: Waiale Rd & Haawi St												
NB LT	7.6	0.01	A	7.7	0.03	A	7.9	0.01	A	8.1	0.04	A
EB LT/RT	11.0	0.22	B	11.0	0.14	B	13.7	0.29	B	14.4	0.20	B
15: Waiale Rd & Kokololio St												
NB LT	7.6	0.00	A	7.9	0.01	A	8.0	0.00	A	8.3	0.02	A
EB LT	12.2	0.18	B	12.2	0.11	B	16.0	0.25	C	17.2	0.18	C
EB RT	9.2	0.03	A	9.6	0.01	A	10.2	0.04	B	10.6	0.02	B

* Denotes overcapacity condition, v/c ≥ 1

4. FUTURE YEAR 2021 TRAFFIC CONDITIONS

The Future Year 2021 scenario represents the traffic conditions within the Project study area with the full build-out of the Project.

4.1 Background

The Project proposes to develop approximately 14.4-acres of land to provide 324 multi-family dwelling units south of Kuikahi Drive between Honoapiilani Highway and Waiale Road. Vehicular traffic to the Project will be provided by two (2) new Project accesses; one along Kuikahi Drive directly across the Kehalani Village Center driveway and another along Waiale Road towards the south frontage of the Project site.

4.2 Travel Demand Estimations

4.2.1 Transportation Demand Management (TDM) Assumptions

The State of Hawaii Department of Transportation (HDOT) and Maui County provide various TDM programs that promote the use of transit, walking, biking and alternative modes of transportation, to reduce the use of single-occupant vehicles on roadways. TDM measures discussed in this section have only been identified, but conservatively assumed to yield no vehicular reductions for Project generated traffic.

Maui County, in partnership with Roberts Hawaii provides bus service to the major areas in Maui. In the vicinity of the Project, the Maui Bus currently provides two (2) bus stops near the Project site. The first is part of the Wailuku Loop route that stops along Waiale Road in front of the Ka Hale A Ke Ola Resource Center, about 0.3 miles north of the Kuikahi Drive/Waiale Road/Maui Lani Parkway intersection. A marked crosswalk and rectangular rapid flash beacon (RRFB) is provided at the bus stop to provide for pedestrian crossings. The second bus stop is part of the Lahaina-Wailuku route that stops at the Honoapiilani Highway/Wilikona Place intersection, about 450 feet south of the Honoapiilani Highway/East Waiko Road intersection. The nearest park and ride lots are currently located to the northeast of the Project, on the southwest corner of the Puunene Avenue/Kuihelani Highway/Dairy Road intersection and to the south of the Project, at the Honoapiilani Highway/North Kihei Road intersection.

HDOT currently provides the Bike Plan Hawaii Master Plan, which identifies proposed bicycle routes that could potentially be implemented in the future. In the vicinity of the study area, Honoapiilani Highway is proposed to be a "signed shared roadway", which is a roadway shared by both vehicles and bicycles, which accommodate bicycles through wider vehicular travel lanes or paved shoulders. Bike lanes have recently been constructed along the Kehalani Village Center frontage on Waiale Road and Kuikahi Drive. The Project is proposing to construct a bike lane and sidewalk on its frontage along Waiale Road and Kuikahi Drive. A newly constructed midblock crosswalk on Kuikahi Drive will also facilitate future pedestrian crossings between Kehalani Village Center and the Project. Pedestrians may also cross Kuikahi Drive at the existing signalized crosswalks across Kuikahi Drive at its intersections with Honoapiilani Highway and Waiale Road.

4.2.2 Trip Generation

The Institute of Transportation Engineers (ITE) publishes a book based on empirical data compiled from a body of more than 4,250 trip generation studies submitted by public agencies, developers, consulting firms, and associations. This publication, titled Trip Generation Manual, 10th Edition, provides trip rates and/or formulae based on graphs that correlate vehicular trips with independent variables. The independent variable can range from Dwelling Units (DU) for single-family attached homes to Gross Floor Area (GFA) for commercial and office development. See Tables 4.1 and 4.2 for Trip Generation formulae and projections for the Project.

Table 4.1: Project Trip Generation Rates

Land Use Type	Independent Variable	AM Peak Hour		PM Peak Hour	
		Rate	% Enter	Rate	% Enter
Multifamily Housing Mid Rise (ITE 221)	Occupied Dwelling Units (DU)	[a]	26%	[b]	61%

Notes:
[a] T = 0.44 * (X) – 4.16
[b] T = 0.46 * (X) – 8.22

Table 4.2: New Project-Generated Trips

Land Use Type	Quantity	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Multifamily Housing Mid Rise (ITE 221)	324 DU	36	103	139	90	51	141

4.2.3 Trip Distribution

Trips generated by the Project were assigned throughout the study area generally based upon existing travel patterns in the study area. The traffic generated by the Project was added to the forecast Base Year 2021 traffic volumes within the vicinity of the Project to constitute the traffic volumes for the Future Year 2021 traffic conditions. Figure 5.1 illustrates the Project-generated trip volumes.

4.3 Future Year 2021 Analysis

Upon completion of the Project, all study intersections are forecast to operate with LOS similar to Base Year 2021 conditions. The eastbound left-turn movement at the Honoapiilani Highway/Kehalani Parkway intersection is forecast to continue operating at over-capacity and LOS F conditions in the AM peak hour, similar to Base Year 2021 conditions. As noted in

Section 3.4, heavy traffic during a short period of time is reflective of typical school conditions, as these queuing conditions were observed to last about 30 minutes during the AM peak hour and likely primarily stem from traffic generated by the Puu Kukui Elementary School. However, the Project is only anticipated to increase traffic at the Honoapiilani Highway/Kehalani Parkway intersection by approximately 1.3%, with individual movement increases generally ranging from 1-15 vehicles. There are currently no identified or planned roadway improvements likely to occur at this intersection.

The southbound left-turn movement at the Kuikahi Drive/Kehalani Village Center Driveway intersection will continue operating at LOS F during the AM and PM peak hours of traffic. With the addition of the Project access at the intersection, the northbound left-turn movement will also operate at LOS F during the AM and PM peak hours of traffic. A signal is not anticipated to be warranted in Future Year 2021 conditions. A right-in, right-out access is an option for the Project's Kuikahi Drive Access, however since there are alternative routes that can be taken in the event of peak hour congestion for the southbound left-turn movement exiting Kehalani Village, northbound left-turn movement exiting the Project and westbound left-turn movement entering the Project, a full movement intersection is currently the preferred alternative. For those vehicles making the southbound left turn movements from the Kehalani Village Center Driveway, Waimaluhia Lane allows for an alternative pathway to get to Kuikahi Drive to continue south towards Waiko Road or continue east to Maui Lani Parkway, via the signalized intersection at Waiale Road and Kuikahi Drive. Vehicles may also exit via Kamole Street (the north entrance to the Kehalani Village Center) to get to destinations to the north via Honoapiilani Highway or Waiale Road. Similarly, those left-turning vehicles entering and exiting the project site via Kuikahi Drive can route to the Project's Waiale Road driveway, which provides an alternative path to get to/from Honoapiilani Highway, Waiale Road, Waiko Road and Maui Lani Parkway via the Waiale Road/Kuikahi Drive signalized intersection.

Since no roadway improvements are planned to occur at the Waiale Road/Waiinu Road intersection, the westbound left-turn movement will continue operating at LOS F and overcapacity conditions during the AM and PM peak hours. In addition, since no roadway improvements are planned to occur at the Waiale Road/Kaupo Street intersection, Waiale Road/Olomea Street intersection (signal warranted Existing conditions) and Waiale Road/Kaohu Street intersection (signal warranted on forecast Base Year 2021 conditions), LOS E/F and various over-capacity conditions are expected to continue operating similar to existing conditions. However, as discussed in Section 2.3, various issues related to right-of-way constraints, roadway alignment and skewed roadway approach from Oluloa Drive will make it difficult to construct a traffic signal or roundabout at the Waiale Road/Kaohu Street intersection.

For future planning purposes at the above Waiale Road intersections, roadway improvements at the Waiale Road/Waiinu Road intersection (as identified on the STIP), exclusive mainline left-turn storage lanes and/or median refuge lanes along Waiale Road could be considered to help mitigate Waiale Road northbound flows in the AM peak hour of traffic.

Based on the forecast trips, the Project will increase traffic at the Waiale Road/Kuikahi Drive intersection by approximately 2.6%. Although the Project could potentially increase the eastbound left-turn movement by 22 vehicles in the AM peak hour, the Project is providing a second access on Waiale Road that can help reduce impacts to the eastbound left-turn movement by shifting more exiting Project traffic onto Waiale Road so as to not significantly impact the existing queues along Kuikahi Drive. It is recommended that the signal timing plan at the Waiale Road/Kuikahi Drive intersection be optimized by the Project to accommodate the

increase in turning movement traffic generated by both the Project and various nearby developments. Optimizing the signal will not mitigate the existing regional northbound queues along Waiale Road during the AM peak hour, but it can help to optimize vehicular movements during all remaining off-peak and PM peak hours of the day.

At the Project accesses on Kuikahi Drive, the following improvements should be constructed by the Project:

- Provide a new northbound leg with a shared left-turn/through lane and exclusive right-turn lane.
- Restripe the southbound leg to provide a shared left-turn/through lane and exclusive right-turn lane.
- Provide a new westbound left-turn lane to provide approximately 100 feet of storage. Based on AASHTO guidance, about 50 feet of storage is the required minimum, so 100 feet of storage should be sufficient to accommodate forecast westbound left-turn queues.

At the Project accesses on Waiale Road, the following improvement should be provided by the Project:

- Provide a new northbound left-turn lane to provide approximately 100 feet of storage. Based on AASHTO guidance, about 50 feet of storage is the required minimum, so 100 feet of storage should be sufficient to accommodate forecast westbound left-turn queues.

Based on MUTCD signal warrants, a signal will likely not be met at both Project accesses at its intersections with Kuikahi Drive/Kehalani Village Center driveway and Waiale Road.

Figure 4.2 illustrates the Future Year 2021 forecast traffic volumes and LOS for the study intersection movements. Table 4.3 summarizes the Future Year 2021 LOS at the study intersections compared to Base Year 2021 conditions. LOS worksheets are provided in Appendix C.

LEGEND

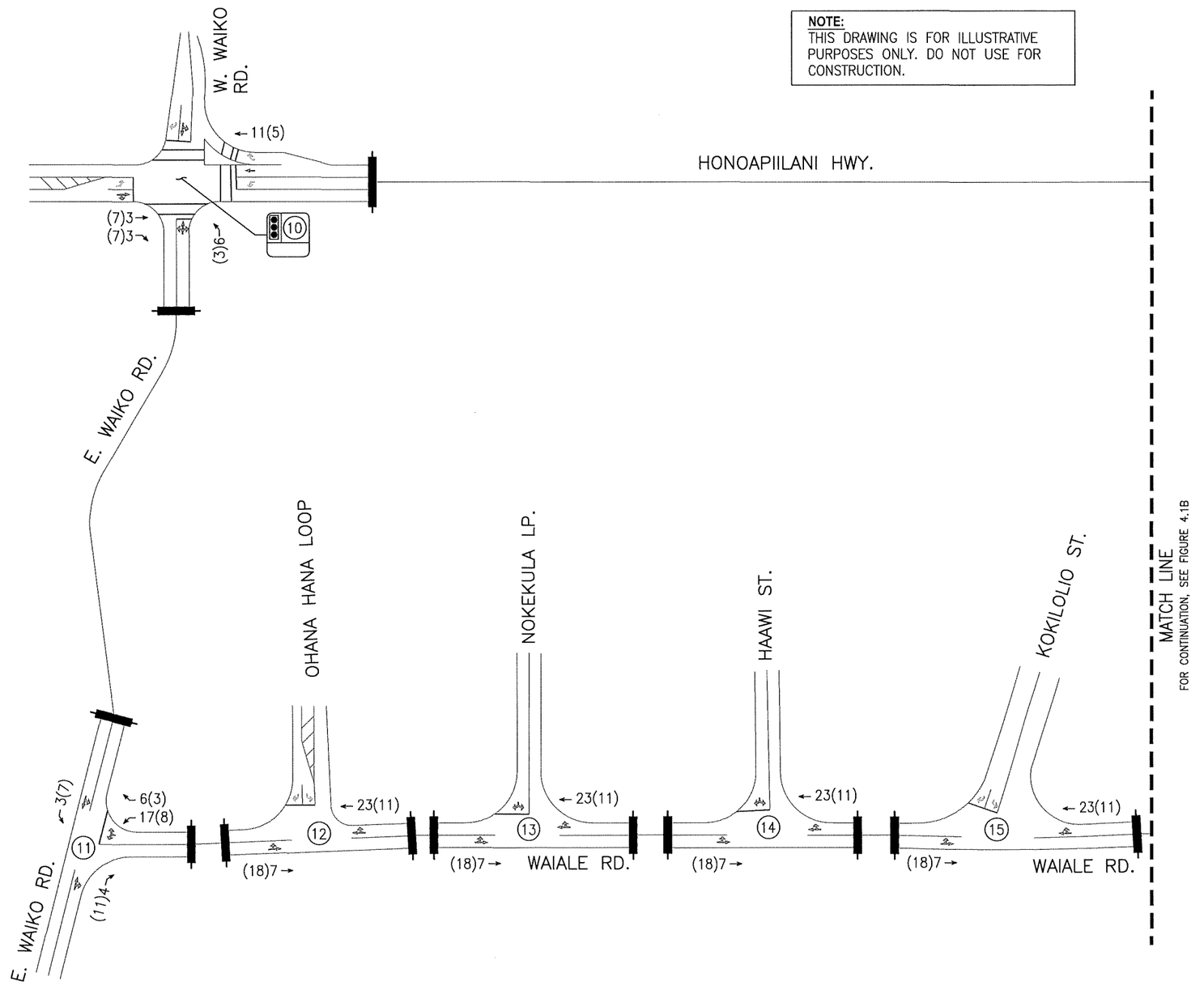
##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

(Y) – SIGNALIZED INTERSECTION Y

(X) – UNSIGNALIZED INTERSECTION X

NOTE:
THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY. DO NOT USE FOR CONSTRUCTION.

NORTH
NOT TO SCALE

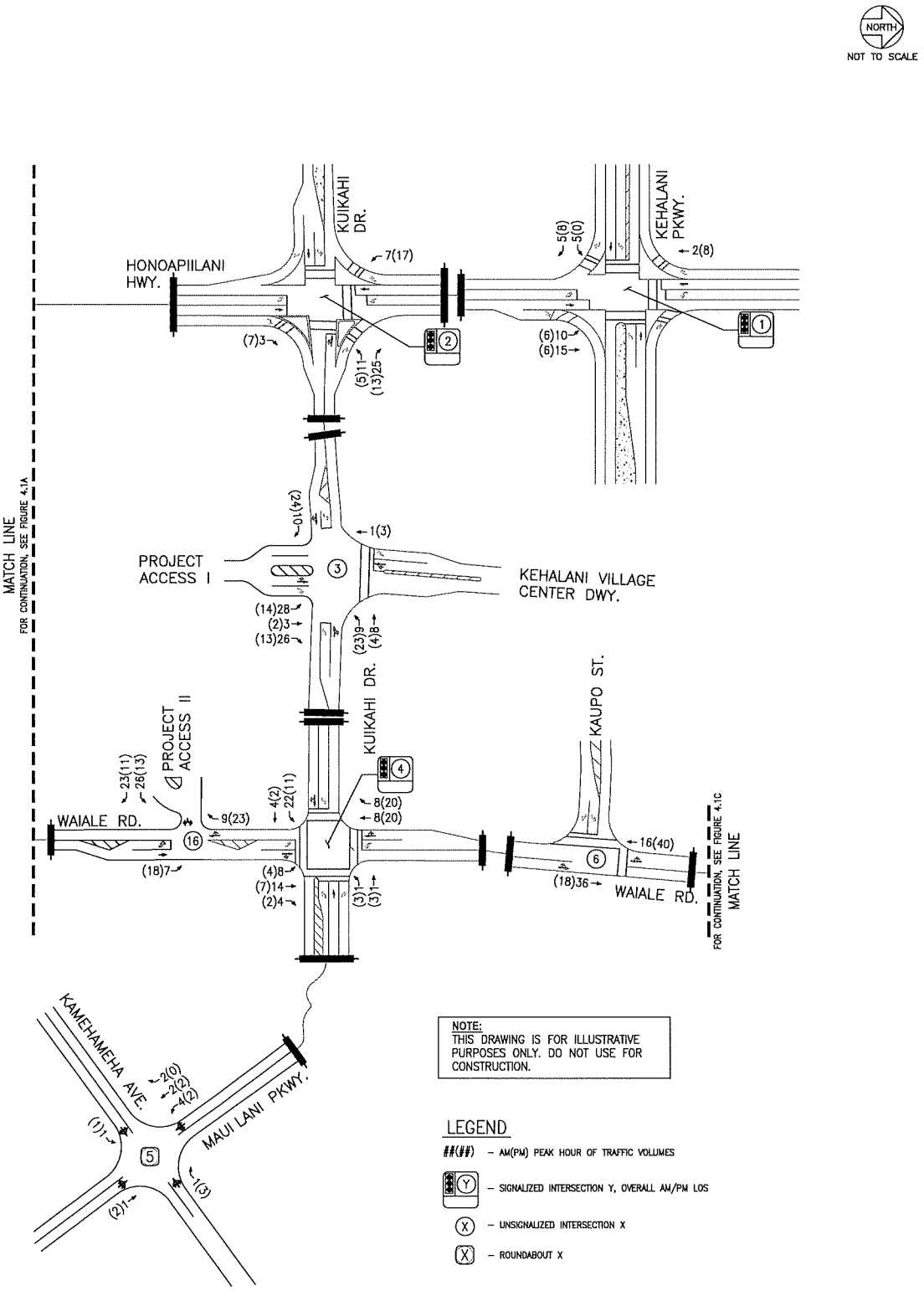


WAILUKU APARTMENTS

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

PROJECT TRIPS

FIGURE
4.1A



WAILUKU APARTMENTS	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII PROJECT TRIPS	FIGURE 4.1B

LEGEND

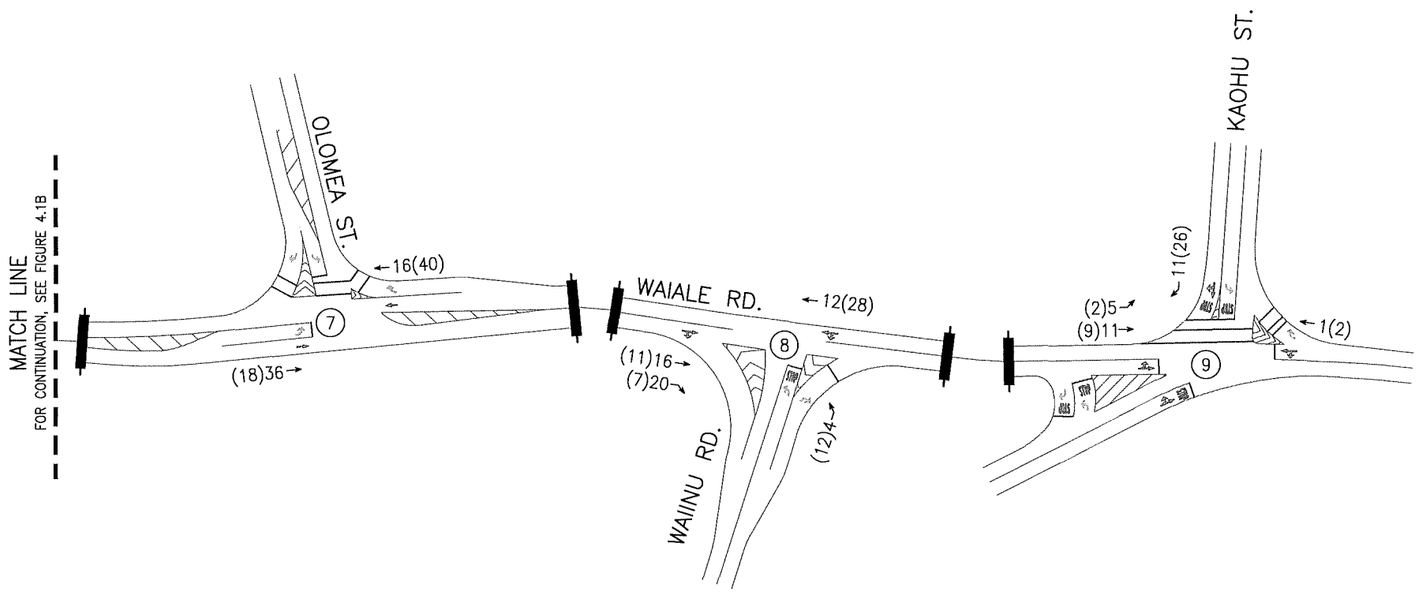
##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

(Y) – SIGNALIZED INTERSECTION Y

(X) – UNSIGNALIZED INTERSECTION X

NORTH

NOT TO SCALE



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PROJECT TRIPS

FIGURE 4.1C

LEGEND

##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

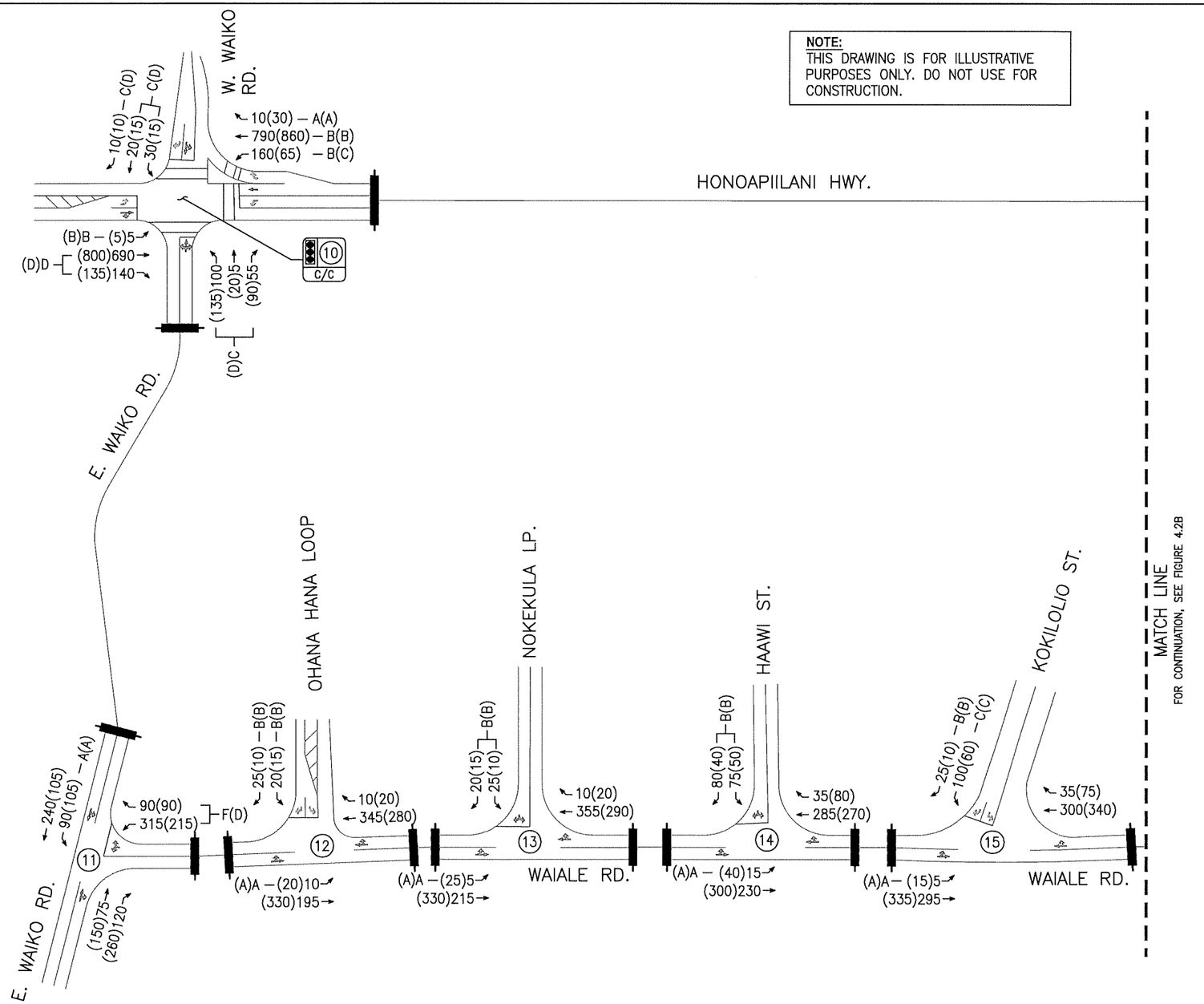
X(X) – AM(PM) LOS

(Y) X/X – SIGNALIZED INTERSECTION Y, OVERALL AM/PM LOS

(X) – UNSIGNALIZED INTERSECTION X

NOTE:
THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY. DO NOT USE FOR CONSTRUCTION.

NORTH
NOT TO SCALE

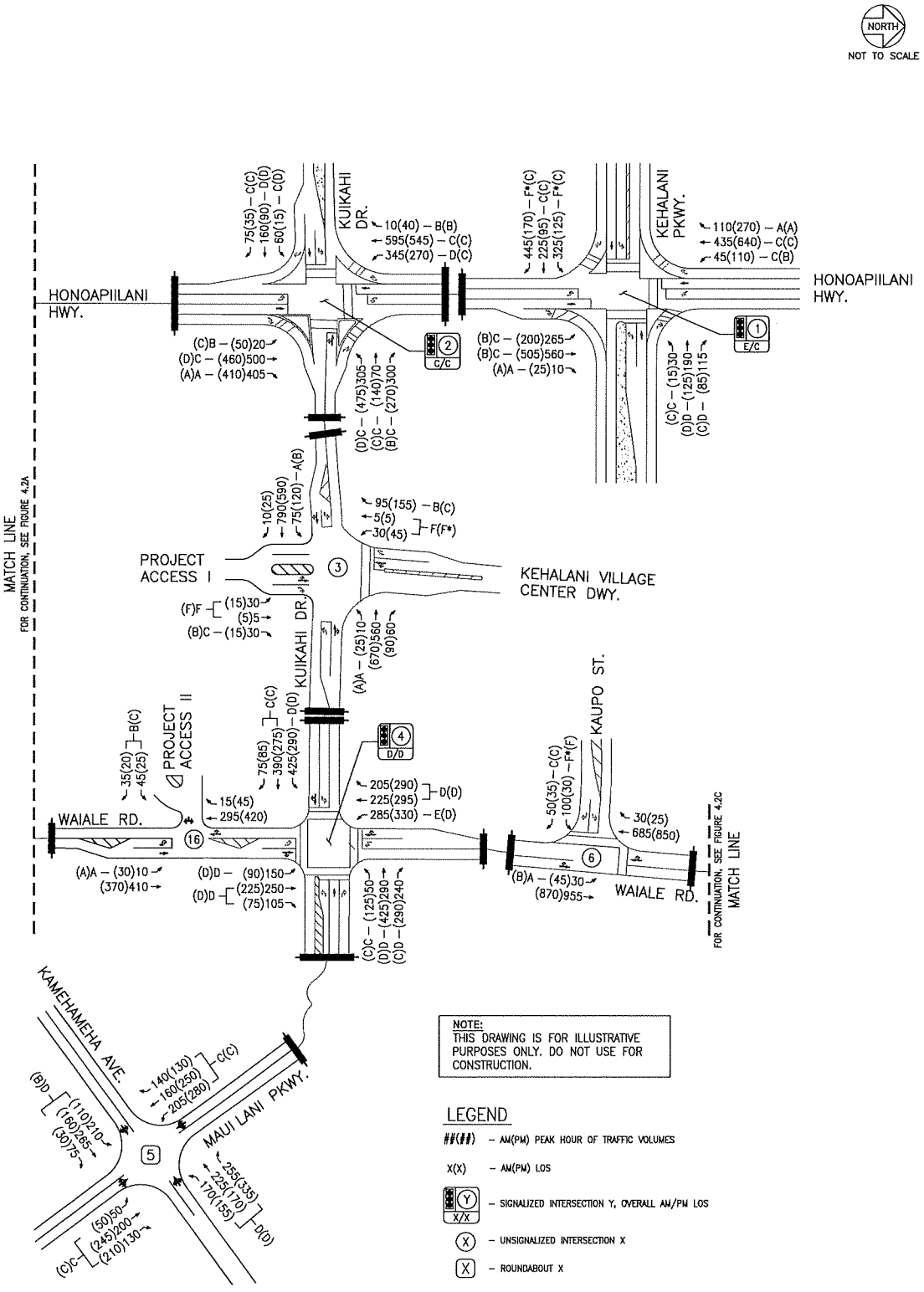


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FUTURE YEAR 2021 LANEAGE, VOLUMES AND LOS

FIGURE
4.2A



WAILUKU APARTMENTS	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII	FIGURE
	FUTURE YEAR 2021 LANEAGE, VOLUMES AND LOS	4.2B

LEGEND

##(##) – AM(PM) PEAK HOUR OF TRAFFIC VOLUMES

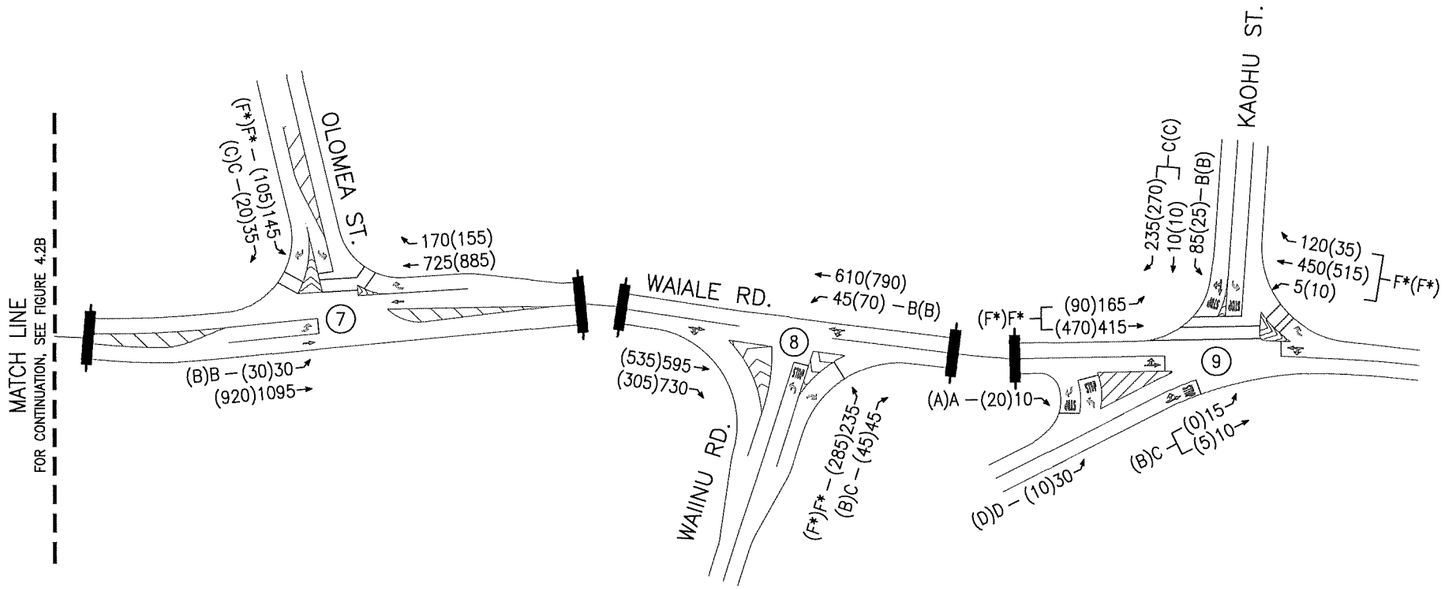
X(X) – AM(PM) LOS

(Y) X/X – SIGNALIZED INTERSECTION Y, OVERALL AM/PM LOS

(X) – UNSIGNALIZED INTERSECTION X

NORTH

NOT TO SCALE



WAILUKU APARTMENTS

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FIGURE 4.2C

FUTURE YEAR 2021 LANEAGE, VOLUMES AND LOS

Table 4.3: Existing, Base Year 2021 and Year 2021 with Project Level of Service Summary

Intersection	Existing Conditions						Base Year 2021						Future Year 2021					
	AM			PM			AM			PM			AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
1: Honoapiilani Hwy & Kehalani Pkwy																		
NB LT	17.9	0.59	B	12.0	0.39	B	19.9	0.72	B	16.7	0.63	B	20.5	0.74	C	17.2	0.66	B
NB TH	26.6	0.77	C	15.5	0.55	B	27.8	0.79	C	17.9	0.63	B	28.4	0.80	C	18.0	0.63	B
NB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
EB LT	59.2	0.97	E	22.0	0.39	C	162.9	1.25	F*	26.5	0.49	C	178.4	1.29	F*	27.0	0.49	C
EB TH	21.6	0.38	C	22.5	0.20	C	26.6	0.47	C	27.9	0.31	C	27.1	0.47	C	28.4	0.31	C
EB RT	30.6	0.77	C	24.2	0.52	C	98.7	1.08	F*	30.2	0.61	C	107.3	1.11	F*	31.1	0.65	C
WB LT	27.4	0.12	C	24.5	0.05	C	30.9	0.14	C	30.2	0.07	C	31.3	0.14	C	30.7	0.07	C
WB TH	33.8	0.75	C	27.7	0.58	C	38.7	0.79	D	35.4	0.70	D	39.3	0.80	D	36.0	0.71	D
WB RT	32.2	0.57	C	27.7	0.55	C	36.2	0.57	D	34.2	0.56	C	36.7	0.57	D	34.8	0.56	C
SB LT	20.0	0.17	C	10.5	0.23	B	20.7	0.19	C	12.7	0.30	B	20.9	0.20	C	12.8	0.30	B
SB TH	29.7	0.72	C	19.3	0.75	B	32.6	0.79	C	28.4	0.86	C	32.9	0.80	C	29.5	0.86	C
SB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
Overall	32.5	-	C	18.8	-	B	61.4	-	E	24.6	-	C	65.5	-	E	25.1	-	C
2: Honoapiilani Highway & Kuikahi Drive																		
NB LT	16.1	0.04	B	17.6	0.14	B	18.4	0.09	B	20.9	0.23	C	18.4	0.09	B	21.0	0.23	C
NB TH	26.8	0.78	C	27.0	0.75	C	34.3	0.85	C	42.5	0.88	D	34.3	0.85	C	43.4	0.89	D
NB RT	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A
EB LT	27.7	0.19	C	28.3	0.04	C	31.0	0.22	C	35.3	0.08	D	31.0	0.23	C	35.8	0.08	D
EB TH	33.7	0.70	C	30.3	0.40	C	43.6	0.78	D	39.7	0.66	D	43.6	0.78	D	40.2	0.67	D
EB RT	29.9	0.37	C	27.7	0.13	C	33.5	0.38	C	34.5	0.21	C	33.5	0.38	C	34.9	0.21	C
WB LT	23.6	0.65	C	23.7	0.72	C	31.8	0.75	C	37.8	0.87	D	34.5	0.79	C	40.7	0.89	D
WB TH	22.0	0.15	C	17.4	0.18	B	24.9	0.17	C	21.1	0.25	C	24.9	0.17	C	21.5	0.26	C
WB RT	17.4	0.42	B	13.4	0.28	B	20.1	0.51	C	15.8	0.39	B	20.8	0.55	C	16.0	0.41	B
SB LT	17.8	0.70	B	15.8	0.55	B	46.6	0.93	D	28.0	0.78	C	53.1	0.96	D	31.9	0.82	C
SB TH	16.4	0.60	B	21.4	0.70	C	22.4	0.75	C	29.7	0.80	C	22.4	0.75	C	28.9	0.79	C
SB RT	9.6	0.01	A	13.8	0.06	B	10.2	0.01	B	15.1	0.07	B	10.2	0.01	B	15.0	0.07	B
Overall	21.9	-	C	21.7	-	C	31.1	-	C	31.7	-	C	32.4	-	C	32.7	-	C
3. Kuikahi Dr & Kehalani Village Center Drwy & Project Access I																		
NB LT/TH	-	-	-	-	-	-	-	-	-	-	-	-	196.1	0.78	F	244.3	0.68	F
NB RT	-	-	-	-	-	-	-	-	-	-	-	-	16.2	0.09	C	13.0	0.04	B
EB LT	8.8	0.07	A	9.2	0.11	A	9.3	0.09	A	10.3	0.16	B	9.3	0.09	A	10.3	0.16	B
WB LT	-	-	-	-	-	-	-	-	-	-	-	-	9.7	0.01	A	9.0	0.03	A
SB LT	34.8	0.21	D	33.9	0.23	D	59.9	0.34	F	88.2	0.56	F	-	-	-	-	-	-
SB LT/TH	-	-	-	-	-	-	-	-	-	-	-	-	141.3	0.65	F	265.1	1.05	F*
SB RT	13.0	0.18	B	14.4	0.27	B	14.6	0.22	B	20.4	0.42	C	14.7	0.22	B	20.6	0.42	C

* Denotes overcapacity condition, v/c ≥ 1.

Table 4.3: Existing, Base Year 2021 and Year 2021 with Project Level of Service Summary Cont'd

Intersection	Existing Conditions						Base Year 2021						Future Year 2021					
	AM			PM			AM			PM			AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
4: Waiale Rd & Kuikahi Dr/Maui Lani Pkwy																		
NB LT	24.7	0.42	C	23.2	0.23	C	32.9	0.58	C	35.3	0.51	D	40.5	0.67	D	44.0	0.62	D
NB TH/RT	35.4	0.80	D	27.3	0.53	C	48.1	0.87	D	39.6	0.70	D	54.2	0.89	D	39.5	0.64	D
EB LT	22.1	0.81	C	17.6	0.65	B	45.0	0.94	D	40.9	0.86	D	54.2	0.96	D	53.4	0.91	D
EB TH/RT	18.1	0.51	B	18.3	0.46	B	27.6	0.68	C	30.1	0.60	C	28.1	0.66	C	33.3	0.62	C
WB LT	23.9	0.10	C	18.7	0.17	B	32.3	0.19	C	25.9	0.37	C	34.4	0.18	C	28.8	0.38	C
WB TH	31.8	0.72	C	27.5	0.77	C	48.5	0.85	D	47.5	0.88	D	53.7	0.87	D	54.9	0.90	D
WB RT	33.6	0.78	C	26.4	0.71	C	34.7	0.10	C	29.5	0.16	C	37.0	0.11	D	32.6	0.16	C
SB LT	24.4	0.68	C	19.7	0.61	B	44.0	0.85	D	36.7	0.82	D	57.7	0.92	E	37.3	0.81	D
SB TH/RT	36.1	0.81	D	34.2	0.87	C	37.1	0.78	D	42.3	0.90	D	42.6	0.83	D	49.7	0.92	D
Overall	27.6	-	C	24.8	-	C	40.1	-	D	38.8	-	D	46.4	-	D	44.3	-	D
5: Kamehameha Ave & Maui Lani Pkwy																		
NB LT	24.5	0.55	C	15.9	0.20	C	-	-	-	-	-	-	-	-	-	-	-	-
NB TH/RT	53.9	0.90	F	18.2	0.38	C	-	-	-	-	-	-	-	-	-	-	-	-
NB LT/TH/RT	-	-	-	-	-	-	25.7	0.81	D	14.4	0.52	B	26.3	0.81	D	14.5	0.52	B
EB LT/TH/RT	82.3	1.03	F*	109.2	1.11	F*	15.9	0.66	C	22.3	0.80	C	16.2	0.67	C	22.8	0.81	C
WB LT/TH/RT	57.4	0.93	F	76.9	1.05	F*	19.0	0.65	C	22.3	0.75	C	19.3	0.66	C	22.3	0.75	C
SB LT	23.0	0.52	C	19.1	0.44	C	-	-	-	-	-	-	-	-	-	-	-	-
SB TH/RT	88.0	1.06	F*	51.9	0.93	F	-	-	-	-	-	-	-	-	-	-	-	-
SB LT/TH/RT	-	-	-	-	-	-	31.8	0.88	D	25.2	0.83	D	31.8	0.88	D	25.8	0.84	D
6: Waiale Rd & Kaupo St																		
NB LT	8.8	0.03	A	9.3	0.05	A	9.4	0.04	A	10.1	0.07	B	9.5	0.04	A	10.3	0.07	B
EB LT	110.5	0.85	F	46.3	0.27	E	323.2	1.38	F*	109.2	0.51	F	376.8	1.49	F*	128.0	0.56	F
EB RT	12.9	0.10	B	13.9	0.08	B	15.0	0.13	C	16.9	0.11	C	15.3	0.13	C	17.7	0.12	C
7: Waiale Rd & Olomea St																		
NB LT	9.5	0.04	A	9.9	0.04	A	10.2	0.05	B	10.9	0.05	B	10.3	0.05	B	11.1	0.05	B
EB LT	513.5	1.86	F*	190.8	1.09	F*	1111.1	3.09	F*	658.2	2.08	F*	1240.4	3.35	F*	785.5	2.33	F*
EB RT	14.0	0.08	B	14.9	0.05	B	16.4	0.11	C	18.2	0.07	C	16.7	0.11	C	19.1	0.08	C

* Denotes overcapacity condition, v/c ≥ 1.

Table 4.3: Existing, Base Year 2021 and Year 2021 with Project Level of Service Summary Cont'd

Intersection	Existing Conditions						Base Year 2021						Future Year 2021					
	AM			PM			AM			PM			AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
8: Waiale Rd & Waiinu Rd																		
WB LT	485.7	1.86	F*	378.8	1.65	F*	1106.5	3.21	F*	1267.5	3.58	F*	1244.2	3.50	F*	1522.4	4.13	F*
WB RT	17.7	0.15	C	12.5	0.09	B	20.0	0.17	C	14.7	0.12	B	20.7	0.18	C	14.9	0.12	B
SB LT	12.1	0.08	B	9.3	0.08	A	13.2	0.10	B	10.3	0.10	B	13.5	0.10	B	10.4	0.10	B
9: Waiale Rd & Kaohu St/Oluloa Dr																		
NB LT/TH	61.4	0.99	F	27.9	0.79	D	135.8	1.25	F*	94.1	1.11	F*	155.4	1.30	F*	114.0	1.18	F*
NB RT	8.6	0.01	A	8.2	0.03	A	9.5	0.02	A	9.0	0.04	A	9.5	0.02	A	9.2	0.04	A
EB LT	13.3	0.21	B	11.1	0.06	B	14.5	0.24	B	11.9	0.07	B	14.5	0.24	B	12.1	0.07	B
EB TH/RT	13.5	0.33	B	12.7	0.33	B	18.6	0.55	C	18.4	0.57	C	19.5	0.59	C	20.7	0.63	C
WB LT	24.0	0.13	C	22.3	0.05	C	30.8	0.19	D	30.0	0.07	D	32.1	0.20	D	31.6	0.07	D
WB TH/RT	12.3	0.05	B	10.7	0.00	B	15.2	0.17	C	13.1	0.04	B	15.4	0.18	C	13.5	0.05	B
SB LT/TH/RT	75.7	1.04	F*	46.4	0.93	E	138.6	1.25	F*	102.1	1.14	F*	141.4	1.28	F*	114.3	1.18	F*
10: Honoapiilani Hwy & W Waiko Rd/E Waiko Rd																		
NB LT	10.4	0.01	B	10.9	0.02	B	12.1	0.02	B	13.9	0.02	B	12.2	0.02	B	14.5	0.02	B
NB TH/RT	20.2	0.72	C	21.8	0.83	C	39.8	0.96	D	33.9	0.93	C	39.8	0.96	D	37.6	0.94	D
EB LT/TH	28.2	0.12	C	24.4	0.06	C	28.2	0.15	C	36.5	0.10	D	28.2	0.15	C	36.9	0.09	D
EB RT	27.6	0.03	C	24.2	0.03	C	27.5	0.03	C	36.1	0.03	D	27.5	0.03	C	36.5	0.03	D
WB LT/TH/RT	30.1	0.34	C	26.4	0.34	C	31.7	0.49	C	48.4	0.77	D	32.0	0.51	C	50.2	0.78	D
SB LT	11.3	0.33	B	12.6	0.16	B	19.3	0.63	B	23.6	0.31	C	19.3	0.63	B	25.7	0.33	C
SB TH	12.5	0.60	B	13.8	0.69	B	16.4	0.74	B	17.0	0.76	B	16.7	0.75	B	17.8	0.77	B
SB RT	6.4	0.01	A	7.1	0.04	A	6.6	0.01	A	7.0	0.03	A	6.6	0.01	A	7.3	0.03	A
Overall	17.2	-	B	18.3	-	B	27.8	-	C	28.1	-	C	27.9	-	C	30.3	-	C
11: E Waiko Rd & Waiale Rd																		
EB LT	7.6	0.04	A	7.8	0.05	A	7.8	0.07	A	8.5	0.10	A	7.9	0.07	A	8.6	0.10	A
SB LT/RT	14.2	0.40	B	12.1	0.25	B	39.5	0.84	E	28.1	0.68	D	49.4	0.90	E	32.1	0.74	D
12: Waiale Rd & Ohana Hana Loop																		
NB LT	7.7	0.01	A	7.6	0.01	A	8.1	0.01	A	8.0	0.02	A	8.1	0.01	A	8.0	0.02	A
EB LT	10.9	0.03	B	11.1	0.03	B	13.4	0.05	B	14.7	0.04	B	13.4	0.05	B	14.7	0.04	B
EB RT	9.6	0.03	A	9.1	0.01	A	10.6	0.04	B	10.0	0.02	B	10.6	0.04	B	10.0	0.02	B
13: Waiale Rd & Nokekula Lp																		
NB LT	7.7	0.00	A	7.6	0.02	A	8.0	0.01	A	8.0	0.02	A	8.1	0.01	A	8.0	0.02	A
EB LT/RT	10.4	0.07	B	10.0	0.03	B	12.4	0.09	B	12.0	0.05	B	12.7	0.10	B	12.2	0.05	B
14: Waiale Rd & Haawi St																		
NB LT	7.6	0.01	A	7.7	0.03	A	7.9	0.01	A	8.1	0.04	A	8.0	0.01	A	8.2	0.04	A
EB LT/RT	11.0	0.22	B	11.0	0.14	B	13.7	0.29	B	14.4	0.20	B	14.3	0.30	B	14.9	0.21	B
15: Waiale Rd & Kokololio St																		
NB LT	7.6	0.00	A	7.9	0.01	A	8.0	0.00	A	8.3	0.02	A	8.0	0.01	A	8.3	0.02	A
EB LT	12.2	0.18	B	12.2	0.11	B	16.0	0.25	C	17.2	0.18	C	16.6	0.26	C	17.9	0.19	C
EB RT	9.2	0.03	A	9.6	0.01	A	10.2	0.04	B	10.6	0.02	B	10.4	0.04	B	10.7	0.02	B
16: Waiale Rd & Project Access II																		
NB LT	-	-	-	-	-	-	-	-	-	-	-	-	8.0	0.01	A	8.5	0.03	A
EB LT/RT	-	-	-	-	-	-	-	-	-	-	-	-	14.8	0.19	B	16.4	0.13	C

* Denotes overcapacity condition, v/c ≥ 1.

5. CONCLUSIONS

The Project proposes to develop approximately 14.4-acres of land to provide 324 multi-family dwelling units. Vehicular traffic to the Project will be provided by new Project access along Kuikahi Drive across from the Kehalani Village Center driveway, and a secondary vehicle access driveway along Waiale Road. The Project is anticipated to be completed by the Year 2021.

5.1 Existing Conditions

The eastbound left-turn movement at the Honoapiilani Highway/Kehalani Parkway intersection operates at LOS F and overcapacity conditions during the AM peak hour likely due to heavy concentrated traffic as a result of the Puu Kukui Elementary School start time. The movement experiences queues that often extend beyond the existing left-turn storage lane and a portion of vehicles require two cycle lengths to clear the intersection. However, the queuing conditions were only observed to last about 30 minutes during the AM, generally between 7:15-7:45 AM. In addition, northbound traffic queues along Honoapiilani Highway were observed to primarily stem from Wailuku Elementary School. At Aupuni Street, northbound traffic queued back to Kehalani Parkway for about 5-10 minutes during the AM peak hour due to a police officer directing traffic at Aupuni Street to service Wailuku Elementary School traffic in the morning. The police officer is observed to stop mainline northbound and southbound traffic for as much as 30-40 seconds at a time, creating lengthy mainline queues. This impacted the vehicular progression through the Honoapiilani Highway/Kehalani Parkway intersection.

The Kamehameha Avenue/Maui Lani Parkway intersection operates with various movements at LOS F and overcapacity conditions during both AM and PM peak hours of traffic. This is primarily due to regional traffic between the Waikapu-Wailuku-Kahului regions. Queues were inconsistent and varied in length throughout the peak hours, with a short period of extensive southbound queuing during the AM peak hour and periodic eastbound queuing during the AM and PM peak hours of traffic.

At the Waiale Road/Kaohu Street/Oluloa Drive intersection, traffic was generally observed to progress unimpeded along Waiale Road during the AM peak hour, except between 7:30-7:50 AM, where southbound traffic on Waiale Road could queue back near to Wells Street. More critically, northbound traffic on Waiale Road was observed to slowly progress through the intersection. For a brief 5-10 minute period starting from 7:30AM, northbound traffic spilled back at varying lengths from this four-way stop to the upstream Waiale Road/Waiinu Road intersection, causing congestion that stretched back towards Kuikahi Drive. Operationally, the northbound and southbound approaches along Waiale Road operate at or over-capacity conditions with LOS F. Congestion and queuing along Waiale Road generally dissipated around 7:50-7:55 AM. Various constraints limit options to implement mitigative measures to curb congestive conditions at this intersection and along Waiale Road. Right-of-way acquisition may be needed to provide more space for the options of a traffic signal, roundabout, widening improvements and/or the realignments of Waiale Road and Oluloa Drive to provide perpendicular intersection approach angles.

The westbound approach at the Waiale Road/Waiinu Road intersection operates at LOS F and overcapacity conditions during the AM and PM peak hours of traffic due to lengthy delays. Traffic was generally observed to progress unimpeded along Waiale Road during the AM peak hour, except between 7:30-7:50 AM, where northbound traffic on Waiale Road was observed to

slowly progress through the intersection in part due to northbound spillbacks from the Waiale Road/Kaohu Street 4-way stop controlled intersection and reduced northbound speeds generated by frequent northbound right-turning vehicles at the Waiale Road/Waiinu Road intersection. Some northbound vehicles along Waiale Road also stopped within the through travel lane to allow side street vehicles (ranging from 1-6 vehicles at a time) to turn onto or off of Waiale Road, which formed lengthy platoons. Congestion and queuing along Waiale Road generally dissipated around 7:50-7:55 AM.

At the Waiale Road/Olomea Street intersection, during the AM peak hour, due to northbound congestion along Waiale Road, observations indicated that some northbound vehicles along Waiale Road stopped within the through travel lane to allow eastbound left-turn vehicles to turn onto Waiale Road, which contributed to the northbound congestion. Based on a four-hour signal warrant, a signal may be warranted. However, as a temporary mitigative measure, a median refuge lane may help reduce eastbound left-turn vehicle delays by allowing vehicles to turn onto Waiale Road with a two-stage approach; turning left into the refuge lane after finding gaps in southbound traffic, then merging into the Waiale Road through lane after finding gaps in northbound traffic.

Similar to the Waiale Road/Olomea Street intersection, at the Waiale Road/Kaupo Street intersection, observations indicated that some northbound vehicles along Waiale Road stopped within the through travel lane to allow eastbound left-turn vehicles to turn onto Waiale Road, which contributed to the northbound congestion spilling back to Kuikahi Drive during the AM peak hour. An exclusive northbound left-turn lane or a median refuge lane may be considered to improve operations at this intersection and reduce vehicle spill back into Kuikahi Drive.

At the Waiale Road/Kuikahi Drive intersection, all movements currently operate at LOS D or better during the AM and PM peak hours of traffic. However, for about 20-30 minutes during the AM peak hour, vehicles were observed to queue beyond the length of the eastbound left-turn storage lane to the Kehalani Village Drive or as far as Honoapiilani Highway. These queues occur at variable lengths and are dependent on existing northbound queues that spill back from Waiale Road into the Waiale Road/Kuikahi Drive intersection, which limits full progression for eastbound left-turning vehicles.

5.2 Base Year 2021 without the Project

Traffic growth in the study area was estimated for Year 2021 by using the existing count data collected by ATA and the MRTDM, which resulted in an anticipated growth rate of approximately 1.9 percent per year. Nearby future developments that are assumed to be completed by Year 2021 include the Waikapu Light Industrial Project, Waiko Baseyard Light Industrial Development, Kehalani Village Center, Maui Lani Village Center, Central Maui Regional Sports Complex Waiale Affordable Housing, the Kehalani Mauka Residential subdivision, and the Waikapu 201-H Affordable Housing. It was assumed that the Puunani Residences and Waiale Development developments are unlikely to be built by Year 2021, given their current statuses in the permitting process, and were therefore not explicitly included in this TIAR. Waikapu Country Town (WCT) is also still in the entitlements process and full build-out will not occur by Year 2021, however to remain conservative, the Project's initial residential phase was included in this TIAR.

The Waiale Road Extension and Waiko Road Improvements are planned roadway improvements to be constructed in the future. However, since they are unlikely to be built by

Year 2021 given their current status, these roadway improvements were not included in this TIAR. In addition, at the Waiale Road/Waiinu Road intersection, a traffic signal and widening improvements are listed in the Statewide Transportation Improvement Program (STIP). However, it's unknown if this development will be constructed by Year 2021 and was therefore not included in this TIAR. At the Maui Lani Parkway/Kamehameha Avenue intersection, a single-lane roundabout is planned to be constructed and was included in this TIAR.

The eastbound left-turn movement at the Honoapiilani Highway/Kehalani Parkway intersection will continue to operate at LOS F and overcapacity conditions during the AM peak hour. As noted in Section 2.3, heavy traffic during a short period of time is reflective of typical school traffic conditions, as these queuing conditions were observed to last about 30 minutes during the AM peak hour and primarily stem from traffic generated by the Puu Kukui Elementary School. There are currently no identified or planned roadway improvements likely to occur at this intersection. Signal timing may be adjusted, but northbound congestion along Honoapiilani Highway will continue to occur during the AM peak hour.

The southbound left-turn movement at the Kuikahi Drive/Kehalani Village Center Driveway will worsen to operate at LOS F during the AM and PM peak hours of traffic, however will continue to operate with relatively low volume at 30(45) vehicles in the AM(PM) peak hours of traffic.

Since no roadway improvements are planned to occur at the Waiale Road/Waiinu Road intersection, the westbound left-turn movement will continue operating at LOS F and overcapacity conditions during the AM and PM peak hours. In addition, since no roadway improvements are planned to occur at the Waiale Road/Kaupo Street intersection, Waiale Road/Olomea Street intersection (signal warranted under Existing Conditions) and Waiale Road/Kaohu Street intersection, LOS E/F and various over-capacity conditions are expected to continue operating similar to existing conditions. Based on the four-hour signal warrant at the Waiale Road/Kaohu Street intersection, a signal may be warranted for Base Year 2021 conditions. However, as discussed in Section 2.3, various issues related to right-of-way constraints, roadway alignment and skewed roadway approach from Oluloa Drive will make it difficult to construct a traffic signal or roundabout at this intersection.

For future planning purposes at the above Waiale Road intersections, roadway improvements at the Waiale Road/Waiinu Road intersection (as identified on the STIP), exclusive mainline left-turn storage lanes and/or median refuge lanes along Waiale Road could be considered to help mitigate Waiale Road northbound flows in the AM peak hour of traffic.

5.3 Future Year 2021 with the Project

The Project proposes to develop approximately 14.4-acres of land to provide 324 multi-family dwelling units. Vehicular traffic to the Project will be provided by two (2) new Project accesses; one along Kuikahi Drive directly across the Kehalani Village Center driveway and another along Waiale Road towards the south frontage of the Project site. The Project is anticipated to generate approximately 139 AM peak hour trips and 141 PM peak hour trips.

Upon completion of the Project, all study intersections are forecast to operate with LOS similar to Base Year 2021 conditions. The eastbound left-turn movement at the Honoapiilani Highway/Kehalani Parkway intersection is forecast to continue operating at over-capacity and LOS F conditions in the AM peak hour, similar to Base Year 2021 conditions. The Project is only anticipated to increase traffic at the Honoapiilani Highway/Kehalani Parkway intersection by

approximately 1.3%, with individual movement increases generally ranging from 1-15 vehicles. There are currently no identified or planned roadway improvements likely to occur at this intersection.

The southbound left-turn movement at the Kuikahi Drive/Kehalani Village Center Driveway intersection will continue operating at LOS F during the AM and PM peak hours of traffic. With the addition of the Project access at the intersection, the northbound left-turn movement will also operate at LOS F during the AM and PM peak hours of traffic. A signal is not anticipated to be warranted in Future Year 2021 conditions. A right-in, right-out access is an option for the Project's Kuikahi Drive Access, but was determined to be not necessary given that both the southbound left-turn movement at the Kuikahi Drive/Kehalani Village Center Driveway intersection and the northbound left-turn lane at the project driveway/Kuikahi Drive intersection provide alternative pathways to the respective left-turning movement destinations. For those vehicles making the southbound left turn movements from the Kehalani Village Center Driveway, Waimaluhia Lane allows for an alternative pathway to Kuikahi Drive and points east and south, via the signalized intersection at Waiale Road and Kuikahi Drive. Vehicles may also exit via Kamole Street (the north entrance to the Kehalani Village Center) to get to destinations to the north. Similar to those left-turning vehicles exiting the project site onto Kuikahi Drive, the project's Waiale Road driveway provides an alternative path to the west, via the Waiale Road/Kuikahi Drive signalized intersection and an alternative path to the south, via Waiale Road, Waiko Road, and either Kuihelani Highway or Honoapiilani Highway.

Since no roadway improvements are planned to occur at the Waiale Road/Waiinu Road intersection, the westbound left-turn movement will continue operating at LOS F and overcapacity conditions during the AM and PM peak hours. In addition, since no roadway improvements are planned to occur at the Waiale Road/Kaupo Street intersection, Waiale Road/Olomea Street intersection (signal warranted Existing conditions) and Waiale Road/Kaohu Street intersection (signal warranted Base Year 2021 conditions), LOS E/F and various over-capacity conditions are expected to continue operating similar to existing conditions. However, as discussed in Section 2.3, various issues related to right-of-way constraints, roadway alignment and skewed roadway approach from Oluloa Drive will make it difficult to construct a traffic signal or roundabout at this intersection.

For future planning purposes at the above Waiale Road intersections, roadway improvements at the Waiale Road/Waiinu Road intersection (as identified on the STIP), exclusive mainline left-turn storage lanes and/or median refuge lanes along Waiale Road could be considered to help mitigate Waiale Road northbound flows in the AM peak hour of traffic.

Based on the forecast trips, the Project will increase traffic at the Waiale Road/Kuikahi Drive intersection by approximately 2.6%. Although the Project could potentially increase the eastbound left-turn movement by 22 vehicles in the AM peak hour, the Project is providing a second access on Waiale Road that can help reduce impacts to the eastbound left-turn movement by shifting more exiting Project traffic onto Waiale Road so as to not significantly impact the existing queues along Kuikahi Drive. It is recommended that the signal timing plan at the Waiale Road/Kuikahi Drive intersection be optimized by the Project to accommodate the increase in turning movement traffic generated by both the Project and various nearby developments. Optimizing the signal will not mitigate the existing regional northbound queues along Waiale Road during the AM peak hour, but it can help to optimize vehicular movements during all remaining off-peak and PM peak hours of the day.

6. RECOMMENDATIONS

The following Base Year 2021 recommendations are roadway improvements that can be considered without the Project:

Waiale Road Corridor

- For future planning purposes along Waiale Road, traffic control treatment at Waiale Road/Kaohu Street intersection, intersection improvements at the Waiale Road/Waiinu Road intersection (as identified on the STIP) and median refuge lanes along Waiale Road could be considered to help mitigate Waiale Road northbound flows in the AM peak hour of traffic.

The following Future Year 2021 recommendations are proposed to be implemented by the Applicant:

- Construct a bike lane and sidewalk along the Projects frontage on Waiale Road and Kuikahi Drive.

Waiale Road/Kuikahi Drive

- Optimize the Waiale Road/Kuikahi Drive signalized intersection signal timing after completion and occupancy of Wailuku Apartments Project.

Kuikahi Drive/Project Access

- Provide a new northbound leg with a shared left-turn/through lane and exclusive right-turn lane.
- Restripe the southbound leg to provide a shared left-turn/through lane and exclusive right-turn lane.
- Provide a new westbound left-turn lane to provide approximately 100 feet of storage.

Waiale Road/Project Access

- Provide a new northbound left-turn lane to provide approximately 100 feet of storage.

7. REFERENCES

- Austin, Tsutsumi & Associates, Central Maui Regional Sports Complex TIAR, 2014.
- Austin, Tsutsumi & Associates, Waiale Affordable Housing TIAR, 2016.
- Austin, Tsutsumi & Associates, Waikapu Light Industrial Project TIAR, 2013.
- Federal Highway Administration, Manual on Uniform Traffic Control Devices, 2009.
- Fehr & Peers, Waikapu Country Town TIAR, December 2016.
- Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.
- Phillip Rowell & Associates, Waiko Road Light Industrial Park TIAR, 2014.
- Transportation Research Board, Highway Capacity Manual, 6th Edition.

APPENDICES

APPENDIX A

TRAFFIC COUNT DATA

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501 Sumner Street, Suite 521
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Phone: (808) 533-3646 Fax: (808) 526-1267

File Name : AM_Honoapiilani Hwy - Kehalani Pkwy
Site Code : 00000000
Start Date : 3/15/2017
Page No : 1

Groups Printed- Unshifted - Bank 1

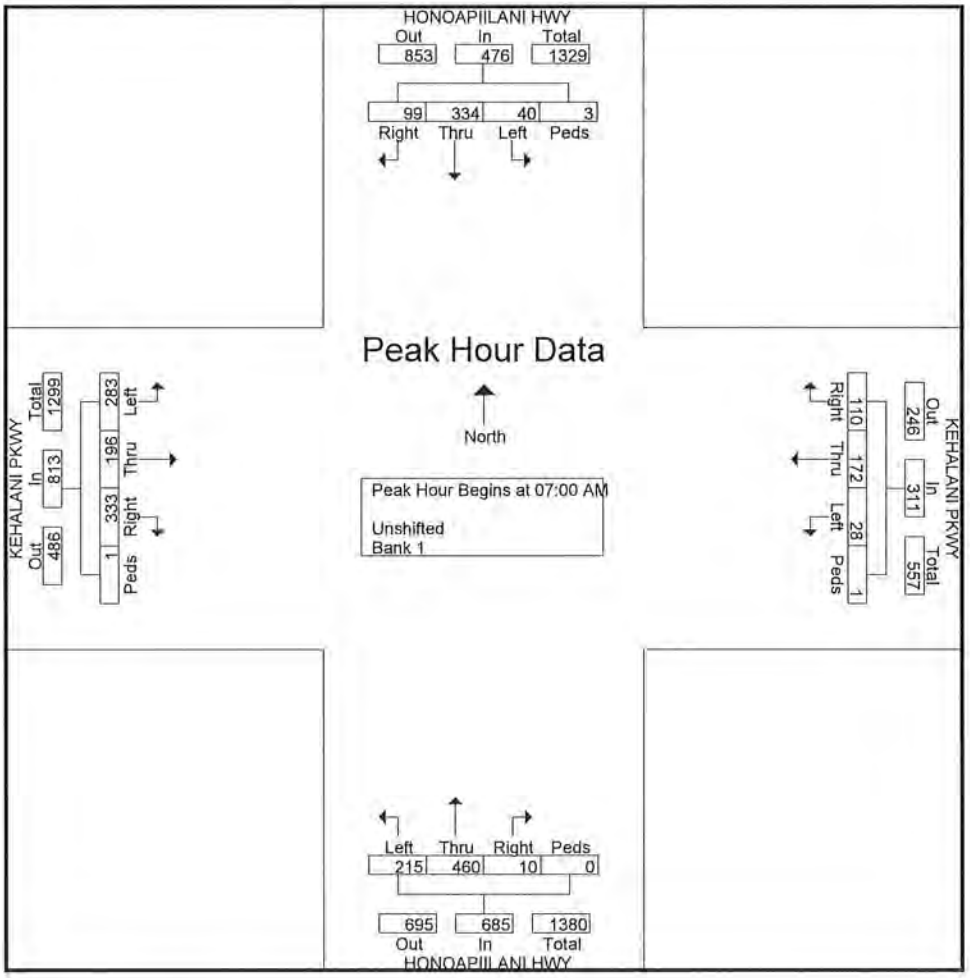
	HONOAPIILANI HWY Southbound				KEHALANI PKWY Westbound				HONOAPIILANI HWY Northbound				KEHALANI PKWY Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:45 AM	3	75	27	0	5	18	18	0	42	81	1	0	43	14	45	0	372
Total	4	75	27	0	5	18	18	0	42	81	1	0	43	14	45	0	373
07:00 AM	6	95	30	0	5	35	21	0	41	106	0	0	77	20	67	0	503
07:15 AM	11	71	33	2	8	51	38	0	73	116	2	0	92	49	90	1	637
07:30 AM	12	79	21	1	6	63	38	1	75	121	7	0	59	78	112	0	673
07:45 AM	11	89	15	0	9	23	13	0	26	117	1	0	55	49	64	0	472
Total	40	334	99	3	28	172	110	1	215	460	10	0	283	196	333	1	2285
08:00 AM	8	74	15	2	5	10	12	0	14	85	0	0	30	15	22	0	292
08:15 AM	1	75	13	0	3	14	15	0	16	105	4	0	27	13	18	0	304
Grand Total	53	558	154	5	41	214	155	1	287	731	15	0	383	238	418	1	3254
Apprch %	6.9	72.5	20	0.6	10	52.1	37.7	0.2	27.8	70.8	1.5	0	36.8	22.9	40.2	0.1	
Total %	1.6	17.1	4.7	0.2	1.3	6.6	4.8	0	8.8	22.5	0.5	0	11.8	7.3	12.8	0	
Unshifted	53	558	154	5	41	214	155	1	287	731	15	0	383	238	418	1	3254
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Site Code : 00000000
Start Date : 3/15/2017
Page No : 2

	HONOAPIILANI HWY Southbound					KEHALANI PKWY Westbound					HONOAPIILANI HWY Northbound					KEHALANI PKWY Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	6	**95**	30	0	**131**	5	35	21	0	61	41	106	0	0	147	77	20	67	0	164	503
07:15 AM	11	71	**33**	**2**	117	8	51	**38**	0	97	73	116	2	0	191	**92**	49	90	**1**	232	637
07:30 AM	**12**	79	21	1	113	6	**63**	38	**1**	**108**	**75**	**121**	**7**	0	**203**	59	**78**	**112**	0	**249**	**673**
07:45 AM	11	89	15	0	115	**9**	23	13	0	45	26	117	1	0	144	55	49	64	0	168	472
Total Volume	40	334	99	3	476	28	172	110	1	311	215	460	10	0	685	283	196	333	1	813	2285
% App. Total	8.4	70.2	20.8	0.6		9	55.3	35.4	0.3		31.4	67.2	1.5	0		34.8	24.1	41	0.1		
PHF	.833	.879	.750	.375	.908	.778	.683	.724	.250	.720	.717	.950	.357	.000	.844	.769	.628	.743	.250	.816	.849



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Site Code : 00000000
Start Date : 3/15/2017
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Groups Printed- Unshifted - Bank 1

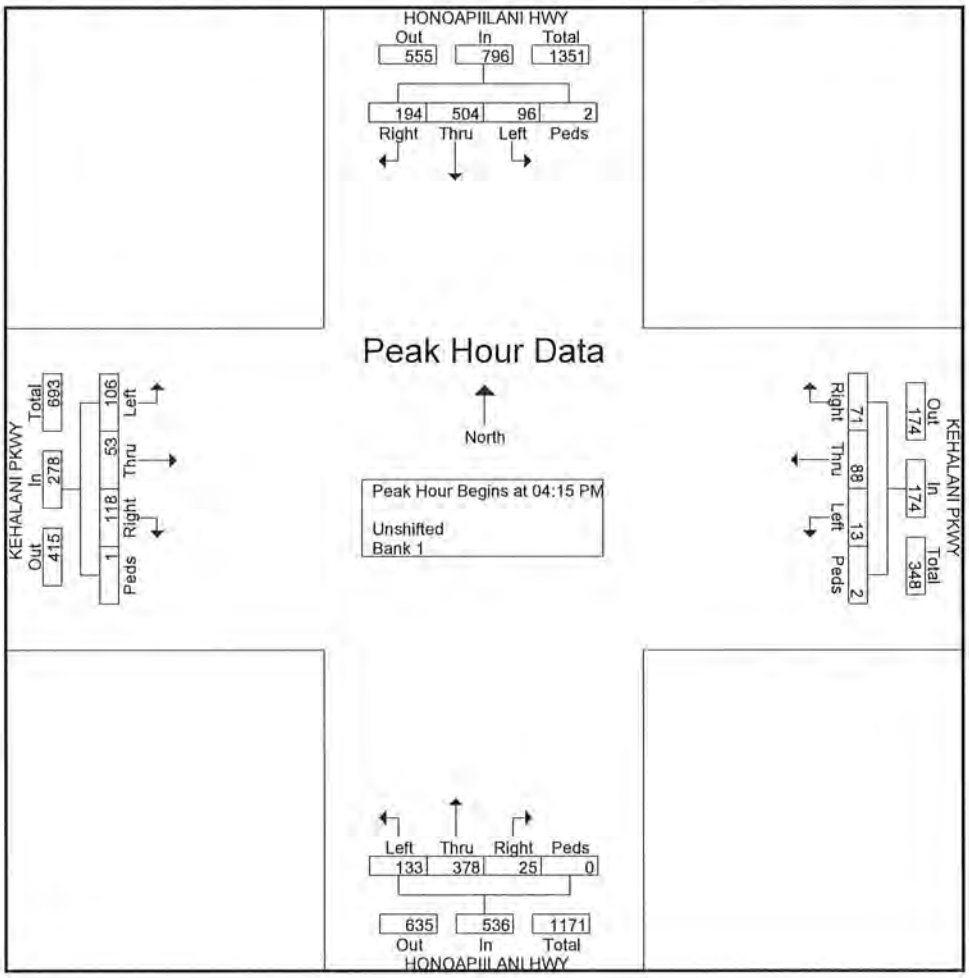
	HONOAPIILANI HWY Southbound				KEHALANI PKWY Westbound				HONOAPIILANI HWY Northbound				KEHALANI PKWY Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	8	112	33	0	2	26	15	0	26	108	2	0	36	27	50	0	445
03:45 PM	13	99	29	0	3	12	16	0	23	128	2	0	32	13	28	0	398
Total	21	211	62	0	5	38	31	0	49	236	4	0	68	40	78	0	843
04:00 PM	12	97	25	1	0	14	25	0	31	127	3	0	28	18	18	1	400
04:15 PM	17	130	48	0	2	20	16	0	30	95	8	0	28	11	33	0	438
04:30 PM	30	133	47	0	5	23	21	0	36	103	6	0	30	15	31	0	480
04:45 PM	28	126	50	1	1	19	14	1	28	87	5	0	28	15	31	1	435
Total	87	486	170	2	8	76	76	1	125	412	22	0	114	59	113	2	1753
05:00 PM	21	115	49	1	5	26	20	1	39	93	6	0	20	12	23	0	431
05:15 PM	18	116	36	2	3	32	17	0	36	94	5	0	37	17	23	2	438
Grand Total	147	928	317	5	21	172	144	2	249	835	37	0	239	128	237	4	3465
Apprch %	10.5	66.4	22.7	0.4	6.2	50.7	42.5	0.6	22.2	74.5	3.3	0	39.3	21.1	39	0.7	
Total %	4.2	26.8	9.1	0.1	0.6	5	4.2	0.1	7.2	24.1	1.1	0	6.9	3.7	6.8	0.1	
Unshifted	147	928	317	5	21	172	144	2	249	835	37	0	239	128	237	4	3465
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	HONOAPIILANI HWY Southbound					KEHALANI PKWY Westbound					HONOAPIILANI HWY Northbound					KEHALANI PKWY Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	17	130	48	0	195	2	20	16	0	38	30	95	**8**	0	133	28	11	**33**	0	72	438
04:30 PM	**30**	**133**	47	0	**210**	**5**	23	**21**	0	49	36	**103**	6	0	**145**	**30**	**15**	31	0	**76**	**480**
04:45 PM	28	126	**50**	**1**	205	1	19	14	**1**	35	28	87	5	0	120	28	15	31	**1**	75	435
05:00 PM	21	115	49	1	186	5	**28**	20	1	**52**	**39**	93	6	0	138	20	12	23	0	55	431
Total Volume	96	504	194	2	796	13	88	71	2	174	133	378	25	0	536	106	53	118	1	278	1784
% App. Total	12.1	63.3	24.4	0.3		7.5	50.6	40.8	1.1		24.8	70.5	4.7	0		38.1	19.1	42.4	0.4		
PHF	.800	.947	.970	.500	.948	.650	.846	.845	.500	.837	.853	.917	.781	.000	.924	.883	.883	.894	.250	.914	.929



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Site Code : 00000000
Start Date : 3/15/2017
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Groups Printed- Unshifted - Bank 1

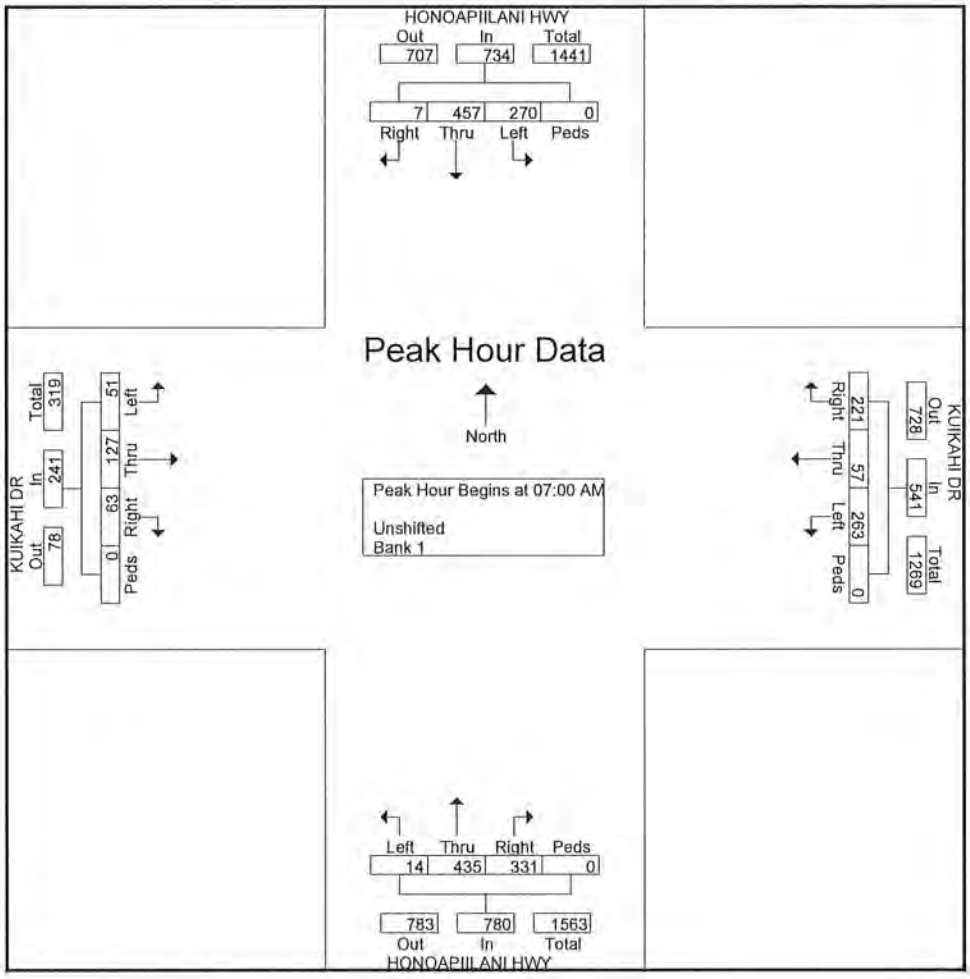
	HONOAPIILANI HWY Southbound				KUIKAHI DR Westbound				HONOAPIILANI HWY Northbound				KUIKAHI DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:45 AM	39	91	0	1	51	7	50	0	1	78	72	0	3	39	6	0	438
Total	39	91	0	1	51	7	50	0	1	78	72	0	3	39	6	0	438
07:00 AM	57	126	1	0	63	13	60	0	0	95	79	0	8	29	15	0	546
07:15 AM	61	96	1	0	55	14	70	0	3	112	86	0	20	48	9	0	575
07:30 AM	79	132	2	0	71	8	57	0	8	139	88	0	18	25	29	0	656
07:45 AM	73	103	3	0	74	22	34	0	3	89	78	0	5	25	10	0	519
Total	270	457	7	0	263	57	221	0	14	435	331	0	51	127	63	0	2296
08:00 AM	23	80	2	4	72	13	30	1	5	75	59	0	3	26	11	0	404
08:15 AM	20	79	1	0	59	17	30	0	1	91	67	0	2	25	14	0	406
Grand Total	352	707	10	5	445	94	331	1	21	679	529	0	59	217	94	0	3544
Apprch %	32.8	65.8	0.9	0.5	51.1	10.8	38	0.1	1.7	55.2	43	0	15.9	58.6	25.4	0	
Total %	9.9	19.9	0.3	0.1	12.6	2.7	9.3	0	0.6	19.2	14.9	0	1.7	6.1	2.7	0	
Unshifted	352	707	10	5	445	94	331	1	21	679	529	0	59	217	94	0	3544
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Site Code : 00000000
Start Date : 3/15/2017

	HONOAPIILANI HWY Southbound					KUIKAHI DR Westbound					HONOAPIILANI HWY Northbound					KUIKAHI DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	57	126	1	0	184	63	13	60	0	136	0	95	79	0	174	8	29	15	0	52	546
07:15 AM	61	96	1	0	158	55	14	**70**	0	**139**	3	112	86	0	201	**20**	**48**	9	0	**77**	575
07:30 AM	**79**	**132**	2	0	**213**	71	8	57	0	136	**8**	**139**	**88**	0	**235**	18	25	**29**	0	72	**658**
07:45 AM	73	103	**3**	0	179	**74**	**22**	34	0	130	3	89	78	0	170	5	25	10	0	40	519
Total Volume	270	457	7	0	734	263	57	221	0	541	14	435	331	0	780	51	127	63	0	241	2296
% App. Total	36.8	62.3	1	0		48.6	10.5	40.9	0		1.8	55.8	42.4	0		21.2	52.7	26.1	0		
PHF	.854	.866	.583	.000	.862	.889	.648	.789	.000	.973	.438	.782	.940	.000	.830	.638	.661	.543	.000	.782	.875



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Site Code : 00000000
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Groups Printed- Unshifted - Bank 1

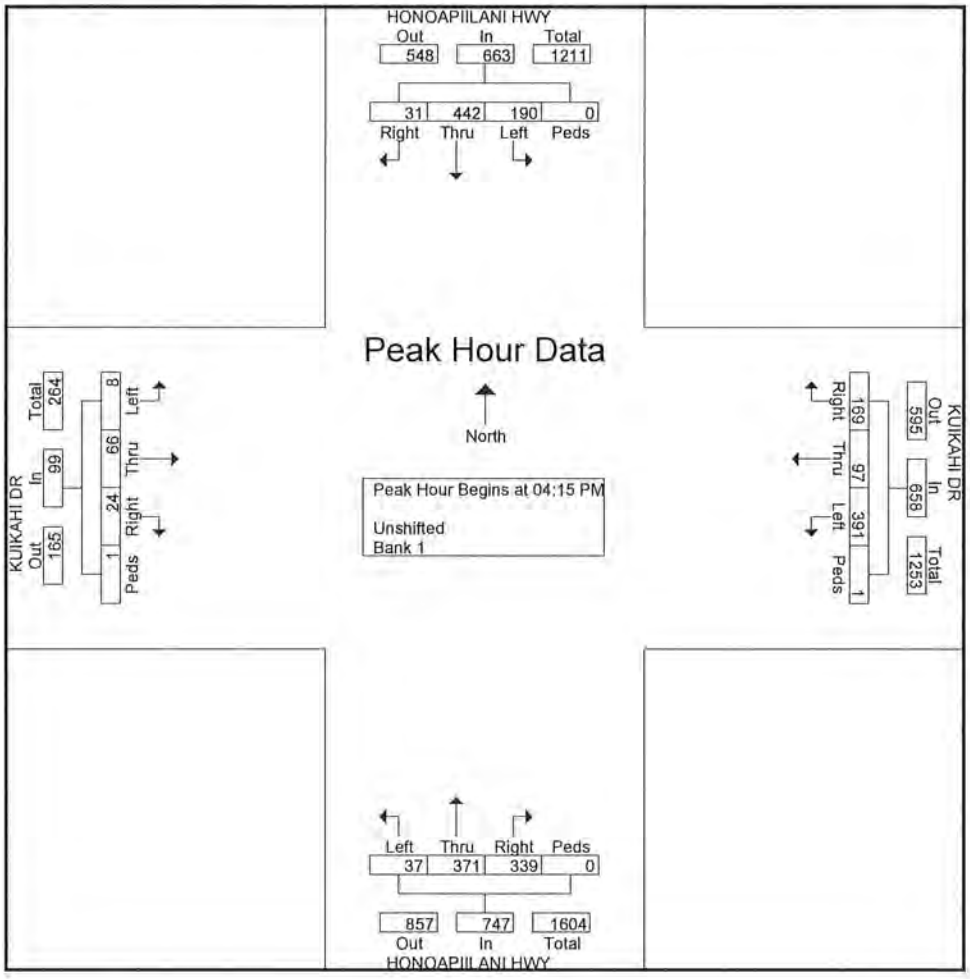
	HONOAPIILANI HWY Southbound				KUIKAHI DR Westbound				HONOAPIILANI HWY Northbound				KUIKAHI DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	63	94	3	0	79	23	48	0	8	86	77	0	1	19	3	0	504
03:45 PM	38	93	4	0	79	32	52	1	7	106	81	0	2	14	2	1	512
Total	101	187	7	0	158	55	100	1	15	192	158	0	3	33	5	1	1016
04:00 PM	31	88	1	2	84	26	55	0	4	102	76	0	4	14	3	1	491
04:15 PM	60	100	8	0	92	29	42	0	6	107	98	0	1	15	7	0	565
04:30 PM	47	134	8	0	97	29	41	0	7	100	88	0	2	17	8	1	579
04:45 PM	48	105	11	0	103	17	41	1	14	79	73	0	2	15	2	0	511
Total	186	427	28	2	376	101	179	1	31	388	335	0	9	61	20	2	2146
05:00 PM	35	103	4	0	99	22	45	0	10	85	80	0	3	19	7	0	512
05:15 PM	44	101	3	0	55	32	44	0	15	92	76	0	1	16	1	0	480
Grand Total	366	818	42	2	688	210	368	2	71	757	649	0	16	129	33	3	4154
Apprch %	29.8	66.6	3.4	0.2	54.3	16.6	29	0.2	4.8	51.3	43.9	0	8.8	71.3	18.2	1.7	
Total %	8.8	19.7	1	0	16.6	5.1	8.9	0	1.7	18.2	15.6	0	0.4	3.1	0.8	0.1	
Unshifted	366	818	42	2	688	210	368	2	71	757	649	0	16	129	33	3	4154
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Site Code : 00000000
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	HONOAPIILANI HWY Southbound					KUIKAHI DR Westbound					HONOAPIILANI HWY Northbound					KUIKAHI DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	60	100	8	0	168	92	29	42	0	163	6	107	98	0	211	1	15	7	0	23	565
04:30 PM	47	134	8	0	189	97	29	41	0	167	7	100	88	0	195	2	17	8	1	28	579
04:45 PM	48	105	11	0	164	103	17	41	1	162	14	79	73	0	166	2	15	2	0	19	511
05:00 PM	35	103	4	0	142	99	22	45	0	166	10	85	80	0	175	3	19	7	0	29	512
Total Volume	190	442	31	0	663	391	97	169	1	658	37	371	339	0	747	8	66	24	1	99	2167
% App. Total	28.7	66.7	4.7	0		59.4	14.7	25.7	0.2		5	49.7	45.4	0		8.1	66.7	24.2	1		
PHF	.792	.825	.705	.000	.877	.949	.836	.939	.250	.985	.661	.867	.865	.000	.885	.667	.868	.750	.250	.853	.936



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File Name : AM_Kehalani Village Ctr Dwy - Kuikahi Dr
Site Code : 00000000
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Groups Printed- Unshifted - Bank 1

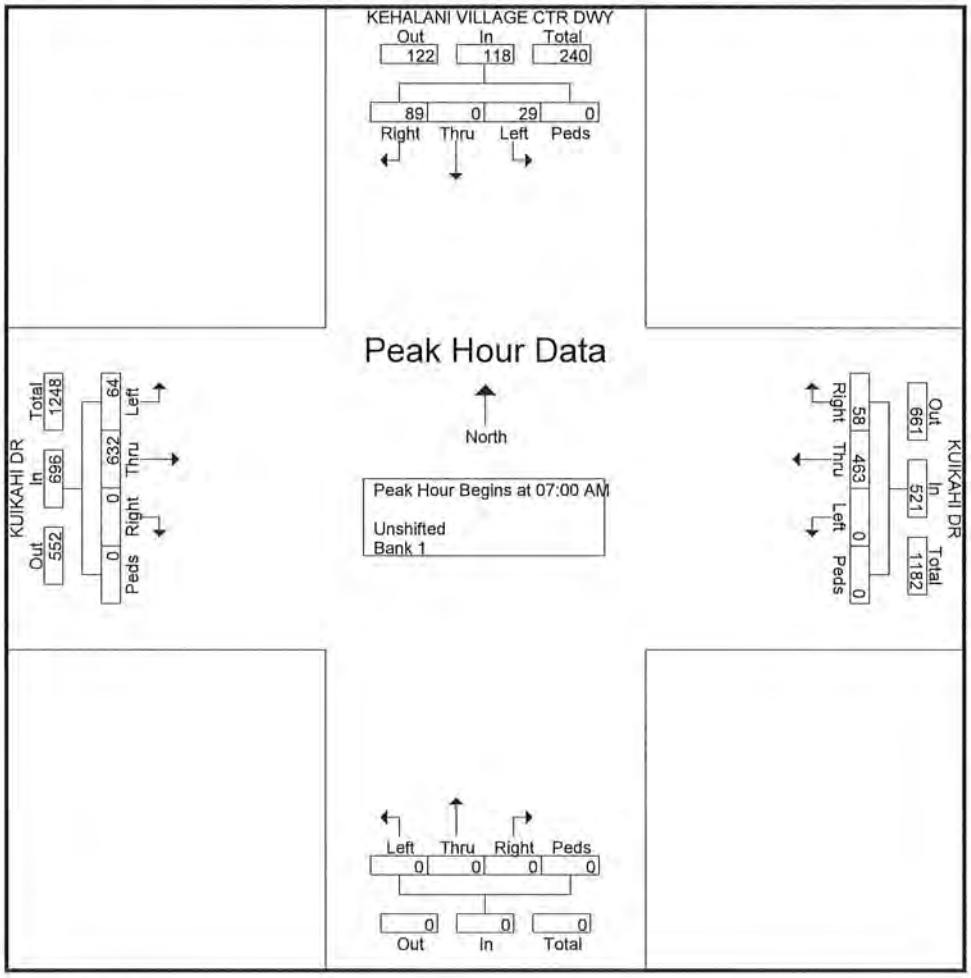
	KEHALANI VILLAGE CTR DWY Southbound				KUIKAHI DR Westbound				Northbound				KUIKAHI DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	3	0	15	0	0	71	4	0	0	0	0	0	13	100	0	0	206
06:45 AM	7	0	16	0	0	93	7	0	0	0	0	0	14	136	0	0	273
Total	10	0	31	0	0	164	11	0	0	0	0	0	27	236	0	0	479
07:00 AM	6	0	18	0	0	119	16	0	0	0	0	0	13	164	0	0	336
07:15 AM	5	0	21	0	0	127	13	0	0	0	0	0	16	168	0	0	350
07:30 AM	6	0	27	0	0	120	13	0	0	0	0	0	22	146	0	0	334
07:45 AM	12	0	23	0	0	97	16	0	0	0	0	0	13	154	0	0	315
Total	29	0	89	0	0	463	58	0	0	0	0	0	64	632	0	0	1335
08:00 AM	9	0	21	0	0	96	13	0	0	0	0	0	16	94	0	0	249
08:15 AM	3	0	17	0	0	73	10	0	0	0	0	0	18	79	0	0	200
Grand Total	51	0	156	0	0	796	92	0	0	0	0	0	125	1041	0	0	2263
Apprch %	24.4	0	75.6	0	0	89.6	10.4	0	0	0	0	0	10.7	89.3	0	0	
Total %	2.3	0	7	0	0	35.2	4.1	0	0	0	0	0	5.5	46	0	0	
Unshifted	51	0	158	0	0	796	92	0	0	0	0	0	125	1041	0	0	2263
% Unshifted	100	0	100	0	0	100	100	0	0	0	0	0	100	100	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	KEHALANI VILLAGE CTR DWY Southbound					KUIKAHI DR Westbound					Northbound					KUIKAHI DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	6	0	18	0	24	0	119	**18**	0	135	0	0	0	0	0	13	164	0	0	177	336
07:15 AM	5	0	21	0	26	0	**127**	13	0	**140**	0	0	0	0	0	16	**168**	0	0	**184**	**350**
07:30 AM	6	0	**27**	0	33	0	120	13	0	133	0	0	0	0	0	**22**	146	0	0	168	334
07:45 AM	**12**	0	23	0	**35**	0	97	16	0	113	0	0	0	0	0	13	154	0	0	167	315
Total Volume	29	0	89	0	118	0	463	58	0	521	0	0	0	0	0	64	632	0	0	696	1335
% App. Total	24.6	0	75.4	0		0	88.9	11.1	0		0	0	0	0		9.2	90.8	0	0		
PHF	.604	.000	.824	.000	.843	.000	.911	.906	.000	.930	.000	.000	.000	.000	.000	.727	.940	.000	.000	.946	.954



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Site Code : 00000000
Start Date : 3/16/2017
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Groups Printed- Unshifted - Bank 1

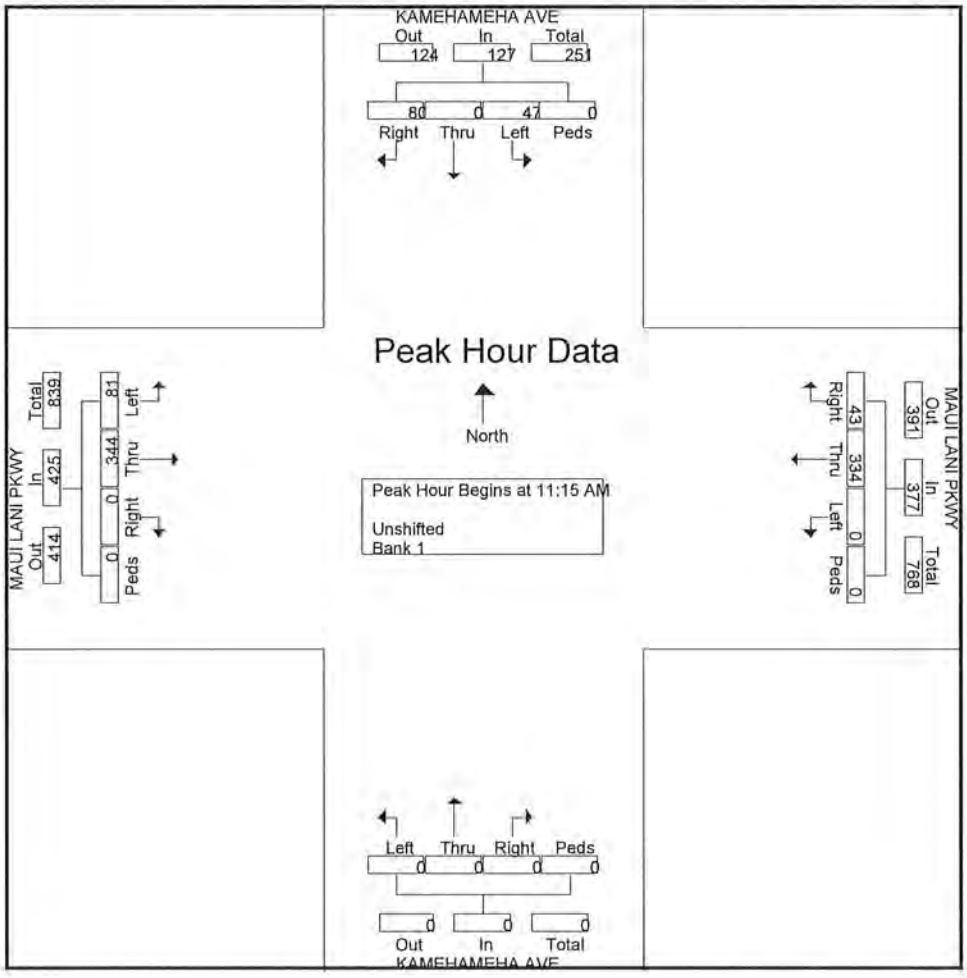
	KAMEHAMEHA AVE Southbound				MAUI LANI PKWY Westbound				KAMEHAMEHA AVE Northbound				MAUI LANI PKWY Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
09:00 AM	6	0	11	0	0	94	9	0	0	0	0	0	12	93	0	0	225
09:15 AM	6	0	13	0	0	71	7	0	0	0	0	0	13	84	0	0	194
09:30 AM	4	0	5	0	0	25	6	0	0	0	0	0	11	45	0	0	96
09:45 AM	6	0	14	0	0	59	5	0	0	0	0	0	10	69	0	0	163
Total	22	0	43	0	0	249	27	0	0	0	0	0	46	291	0	0	678
10:00 AM	9	0	18	0	0	93	15	0	0	0	0	0	11	133	0	0	279
10:15 AM	8	0	13	0	0	72	23	0	0	0	0	0	12	100	0	0	228
10:30 AM	14	0	17	0	0	69	16	0	0	0	0	0	16	80	0	0	212
10:45 AM	8	0	22	0	0	59	13	0	0	0	0	0	10	85	0	0	197
Total	39	0	70	0	0	293	67	0	0	0	0	0	49	398	0	0	916
11:00 AM	8	0	16	0	0	68	9	0	0	0	0	0	19	77	0	0	197
11:15 AM	10	0	18	0	0	74	7	0	0	0	0	0	25	84	0	0	218
11:30 AM	11	0	24	0	0	82	7	0	0	0	0	0	20	74	0	0	218
11:45 AM	13	0	17	0	0	94	13	0	0	0	0	0	20	97	0	0	254
Total	42	0	75	0	0	318	36	0	0	0	0	0	84	332	0	0	887
12:00 PM	13	0	21	0	0	84	16	0	0	0	0	0	16	89	0	0	239
12:15 PM	4	0	19	0	0	73	9	0	0	0	0	0	13	67	0	0	185
12:30 PM	6	0	26	0	0	76	20	0	0	0	0	0	17	78	0	0	223
12:45 PM	5	0	14	1	0	84	15	0	0	0	0	0	17	80	0	0	216
Total	28	0	80	1	0	317	60	0	0	0	0	0	63	314	0	0	863
01:00 PM	4	0	20	0	0	79	16	0	0	0	0	0	13	81	0	0	213
01:15 PM	4	0	25	0	0	81	6	0	0	0	0	0	15	110	0	0	241
01:30 PM	5	0	30	0	0	80	7	0	0	0	0	0	12	106	0	0	240
01:45 PM	6	0	13	0	0	88	15	0	0	0	0	0	24	89	0	0	235
Total	19	0	88	0	0	328	44	0	0	0	0	0	64	386	0	0	929
02:00 PM	3	0	8	0	0	50	5	0	0	0	0	0	13	55	0	0	134
02:15 PM	11	0	20	0	0	105	16	0	0	0	0	0	19	129	0	0	300
Grand Total	164	0	384	1	0	1660	255	0	0	0	0	0	338	1905	0	0	4707
Apprch %	29.9	0	69.9	0.2	0	86.7	13.3	0	0	0	0	0	15.1	84.9	0	0	
Total %	3.5	0	8.2	0	0	35.3	5.4	0	0	0	0	0	7.2	40.5	0	0	
Unshifted	164	0	384	1	0	1660	255	0	0	0	0	0	338	1905	0	0	4707
% Unshifted	100	0	100	100	0	100	100	0	0	0	0	0	100	100	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AUSTIN TSUTSUMI & ASSOCIATES

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Phone: (808) 533-3646 Fax: (808) 526-1267

File Name : MD_Kehalani Village Ctr Dwy - Kuikahi Dr
Site Code : 00000000
Start Date : 3/16/2017

	KAMEHAMEHA AVE Southbound					MAUI LANI PKWY Westbound					KAMEHAMEHA AVE Northbound					MAUI LANI PKWY Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 09:00 AM to 02:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15 AM																					
11:15 AM	10	0	18	0	28	0	74	7	0	81	0	0	0	0	0	25	84	0	0	109	218
11:30 AM	11	0	24	0	35	0	82	7	0	89	0	0	0	0	0	20	74	0	0	94	218
11:45 AM	13	0	17	0	30	0	94	13	0	107	0	0	0	0	0	20	97	0	0	117	254
12:00 PM	13	0	21	0	34	0	84	16	0	100	0	0	0	0	0	16	89	0	0	105	239
Total Volume	47	0	80	0	127	0	334	43	0	377	0	0	0	0	0	81	344	0	0	425	929
% App. Total	37	0	63	0		0	88.6	11.4	0		0	0	0	0		19.1	80.9	0	0		
PHF	.904	.000	.833	.000	.907	.000	.888	.672	.000	.881	.000	.000	.000	.000	.000	.810	.887	.000	.000	.908	.914



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File Name : PM_Kehalani Village Ctr Dwy - Kuikahi Dr
Site Code : 00000000
Start Date : 3/15/2017
Page No : 1

Groups Printed- Unshifted - Bank 1

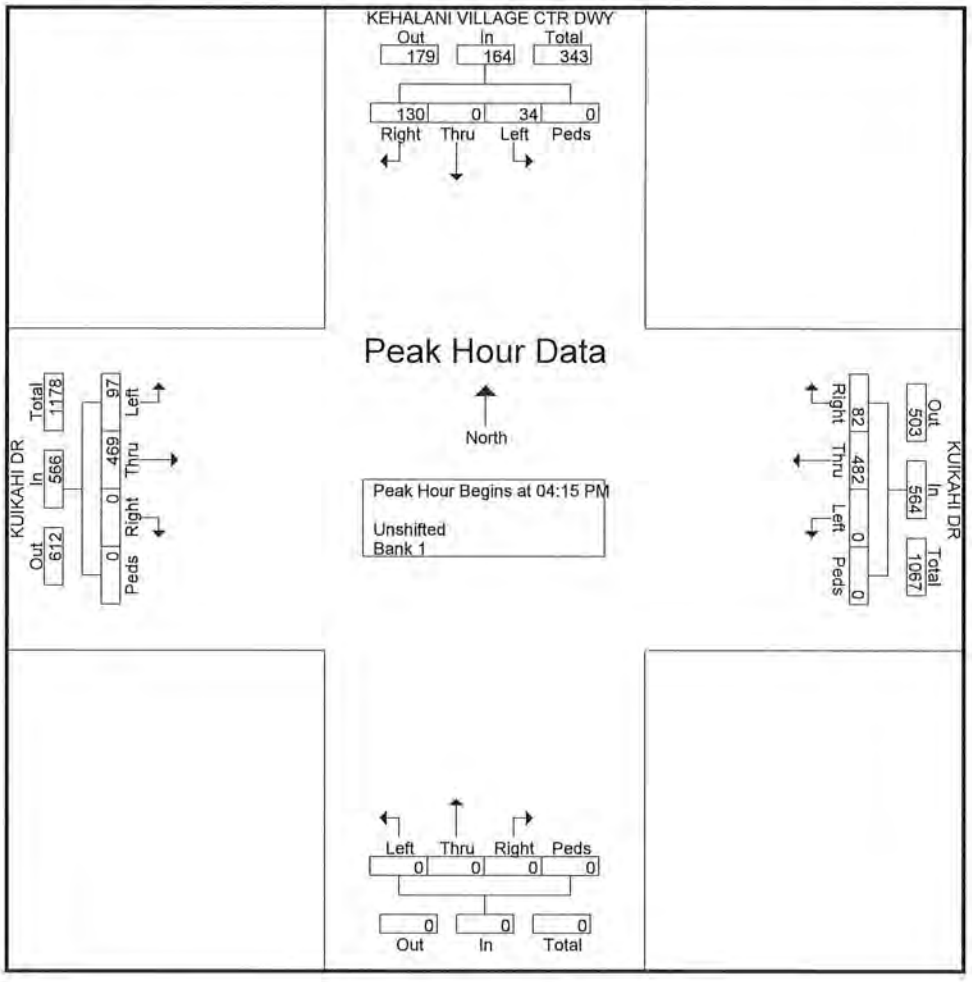
	KEHALANI VILLAGE CTR DWY Southbound				KUIKAHI DR Westbound				Northbound				KUIKAHI DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	14	0	18	0	0	120	20	0	0	0	0	0	28	120	0	0	320
03:45 PM	13	0	37	0	0	110	22	0	0	0	0	0	16	111	0	0	309
Total	27	0	55	0	0	230	42	0	0	0	0	0	44	231	0	0	629
04:00 PM	6	0	24	0	0	130	15	0	0	0	0	0	20	98	0	0	293
04:15 PM	4	0	30	0	0	122	20	0	0	0	0	0	21	146	0	0	343
04:30 PM	7	0	33	0	0	115	22	0	0	0	0	0	30	113	0	0	320
04:45 PM	12	0	28	0	0	125	22	0	0	0	0	0	21	109	0	0	317
Total	29	0	115	0	0	492	79	0	0	0	0	0	92	466	0	0	1273
05:00 PM	11	0	39	0	0	120	18	0	0	0	0	0	25	101	0	0	314
05:15 PM	11	0	30	0	0	87	21	0	0	0	0	0	24	102	0	0	275
Grand Total	78	0	239	0	0	929	160	0	0	0	0	0	185	900	0	0	2491
Apprch %	24.6	0	75.4	0	0	85.3	14.7	0	0	0	0	0	17.1	82.9	0	0	
Total %	3.1	0	9.6	0	0	37.3	6.4	0	0	0	0	0	7.4	36.1	0	0	
Unshifted	78	0	239	0	0	929	160	0	0	0	0	0	185	900	0	0	2491
% Unshifted	100	0	100	0	0	100	100	0	0	0	0	0	100	100	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Site Code : 00000000
Start Date : 3/15/2017
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	KEHALANI VILLAGE CTR DWY Southbound					KUIKAHI DR Westbound					Northbound					KUIKAHI DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	4	0	30	0	34	0	122	20	0	142	0	0	0	0	0	21	**146**	0	0	**167**	**343**
04:30 PM	7	0	33	0	40	0	115	**22**	0	137	0	0	0	0	0	**30**	113	0	0	143	320
04:45 PM	**12**	0	28	0	40	0	**125**	22	0	**147**	0	0	0	0	0	21	109	0	0	130	317
05:00 PM	11	0	**39**	0	**50**	0	120	18	0	138	0	0	0	0	0	25	101	0	0	126	314
Total Volume	34	0	130	0	164	0	482	82	0	564	0	0	0	0	0	97	469	0	0	566	1294
% App. Total	20.7	0	79.3	0		0	85.5	14.5	0		0	0	0	0		17.1	82.9	0	0		
PHF	.708	.000	.833	.000	.820	.000	.964	.932	.000	.959	.000	.000	.000	.000	.000	.808	.803	.000	.000	.847	.943



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File Name : AM_Waiale Rd - Kuikahi Dr_Maui Lani Pkwy
Site Code : 00000000
Start Date : 3/15/2017
Page No : 1

Groups Printed- Unshifted - Bank 1

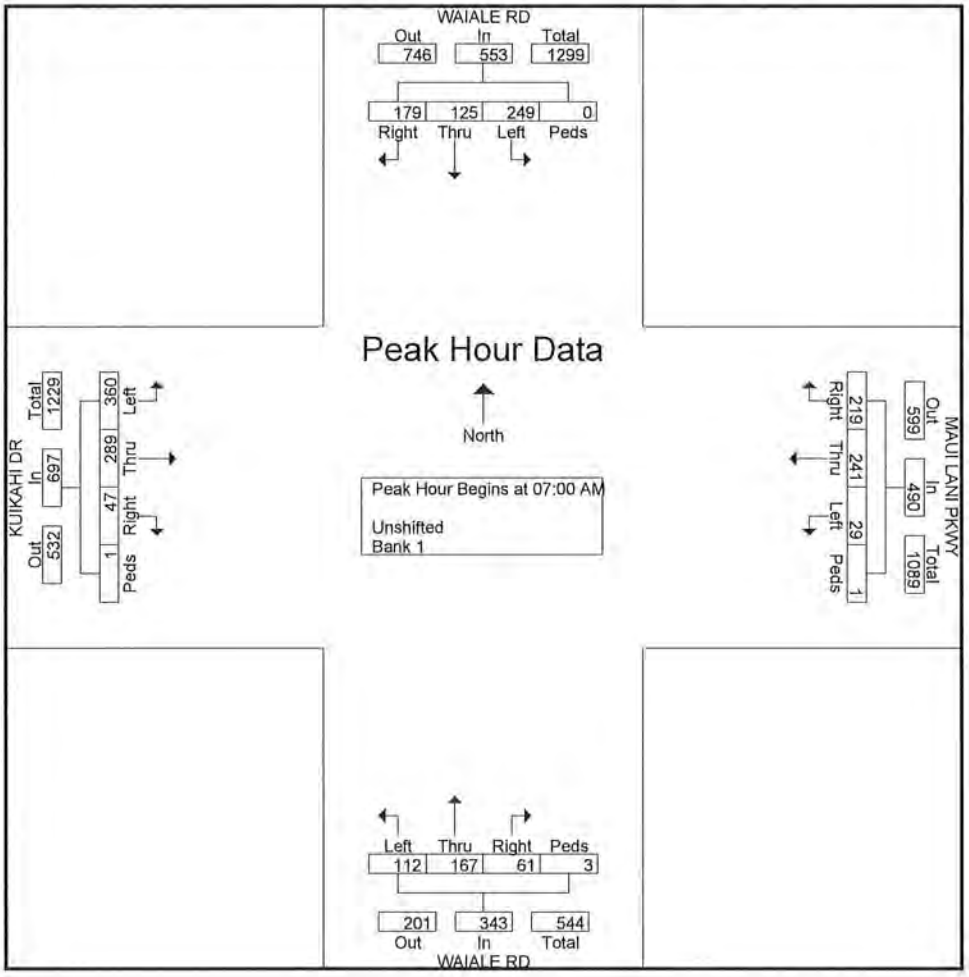
	WAIALE RD Southbound				MAUI LANI PKWY Westbound				WAIALE RD Northbound				KUIKAHI DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	46	24	28	0	4	37	33	0	8	28	11	0	44	42	4	0	309
06:45 AM	47	28	37	1	7	47	57	8	9	39	9	0	77	60	10	1	437
Total	93	52	65	1	11	84	90	8	17	67	20	0	121	102	14	1	746
07:00 AM	52	27	51	0	6	68	50	0	24	31	13	1	89	57	8	1	478
07:15 AM	65	35	36	0	7	55	54	0	40	61	20	0	93	63	11	0	540
07:30 AM	60	33	42	0	7	60	56	0	37	44	16	2	88	86	15	0	546
07:45 AM	72	30	50	0	9	58	59	1	11	31	12	0	90	83	13	0	519
Total	249	125	179	0	29	241	219	1	112	167	61	3	360	289	47	1	2083
08:00 AM	79	25	43	1	11	54	61	0	7	32	3	1	55	49	6	0	427
08:15 AM	35	15	28	0	1	40	41	1	10	16	9	0	46	25	2	0	269
Grand Total	456	217	315	2	52	419	411	10	146	282	93	4	582	465	69	2	3525
Apprch %	46.1	21.9	31.8	0.2	5.8	47	46.1	1.1	27.8	53.7	17.7	0.8	52.1	41.6	6.2	0.2	
Total %	12.9	6.2	8.9	0.1	1.5	11.9	11.7	0.3	4.1	8	2.6	0.1	16.5	13.2	2	0.1	
Unshifted	456	217	315	2	52	419	411	10	146	282	93	4	582	465	69	2	3525
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Site Code : 00000000
Start Date : 3/15/2017
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	WAIALE RD Southbound					MAUI LANI PKWY Westbound					WAIALE RD Northbound					KUIKAHI DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	52	27	51	0	130	6	68	50	0	124	24	31	13	1	69	80	57	8	1	155	478
07:15 AM	**65**	**35**									**40**	**61**	**20**		**121**	**93**	**63**	**11**	**0**	**167**	**540**
07:30 AM	**60**	**33**	**42**	**0**	**135**	**7**	**60**	**56**	**0**	**123**	**37**	**44**	**18**	**2**	**99**	**88**	**86**	**15**	**0**	**189**	**546**
07:45 AM	**72**	**30**	**50**	**0**	**152**	**9**	58	**59**	**1**	**127**	11	31	12	0	54	90	83	13	0	186	519
Total Volume	249	125	179	0	553	29	241	219	1	490	112	167	61	3	343	360	289	47	1	697	2083
% App. Total	45	22.6	32.4	0		5.9	49.2	44.7	0.2		32.7	48.7	17.8	0.9		51.6	41.5	6.7	0.1		
PHF	.865	.893	.877	.000	.910	.806	.886	.928	.250	.965	.700	.684	.763	.375	.709	.968	.840	.783	.250	.922	.954



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File Name : PM_Waiale Rd - Kuikahi Dr_Maui Lani Pkwy
Site Code : 00000000
Start Date : 3/15/2017
Page No : 1

Groups Printed- Unshifted - Bank 1

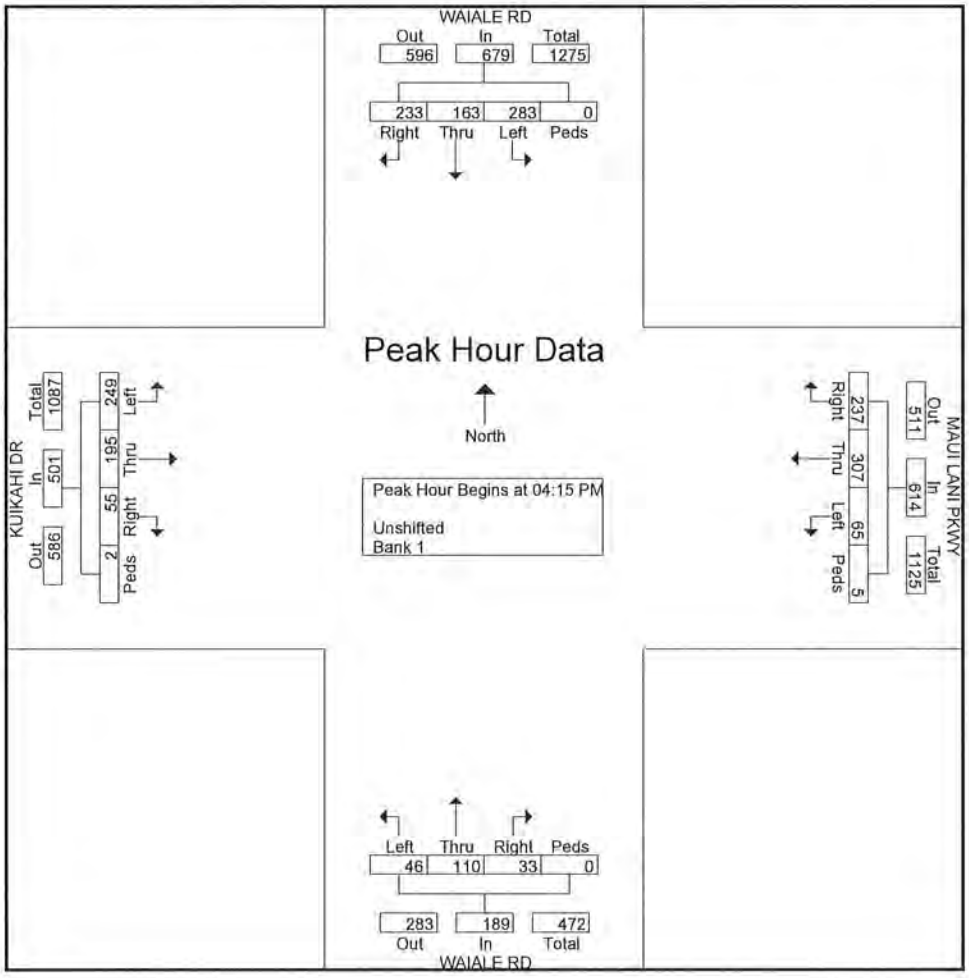
	WAIALE RD Southbound				MAUI LANI PKWY Westbound				WAIALE RD Northbound				KUIKAHI DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	71	35	46	0	16	86	56	1	5	51	24	0	61	73	10	0	535
03:45 PM	75	40	52	0	8	77	57	0	12	33	7	0	64	44	12	0	481
Total	146	75	98	0	24	163	113	1	17	84	31	0	125	117	22	0	1016
04:00 PM	73	40	57	0	17	75	77	0	10	40	8	0	57	40	7	0	501
04:15 PM	64	35	44	0	20	81	48	0	10	29	10	0	67	60	9	0	477
04:30 PM	73	46	67	0	15	76	71	4	10	30	6	0	72	44	13	0	527
04:45 PM	68	45	61	0	15	82	62	1	13	28	10	0	59	53	18	0	515
Total	278	166	229	0	67	314	258	5	43	127	34	0	255	197	47	0	2020
05:00 PM	78	37	61	0	15	68	56	0	13	23	7	0	51	38	15	2	464
05:15 PM	55	32	35	0	10	62	55	0	6	28	13	0	64	35	11	2	408
Grand Total	557	310	423	0	116	607	482	6	79	262	85	0	495	387	95	4	3908
Apprch %	43.2	24	32.8	0	9.6	50.1	39.8	0.5	18.5	61.5	20	0	50.5	39.4	9.7	0.4	
Total %	14.3	7.9	10.8	0	3	15.5	12.3	0.2	2	6.7	2.2	0	12.7	9.9	2.4	0.1	
Unshifted	557	310	423	0	116	607	482	6	79	262	85	0	495	387	95	4	3908
% Unshifted	100	100	100	0	100	100	100	100	100	100	100	0	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : PM_Waiale Rd - Kuikahi Dr_Maui Lani Pkwy
Site Code : 00000000
Start Date : 3/15/2017
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	WAIALE RD Southbound					MAUI LANI PKWY Westbound					WAIALE RD Northbound					KUIKAHI DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	64	35	44	0	143	**20**	81	48	0	149	10	29	**10**	0	49	67	**60**	9	0	**136**	477
04:30 PM	73	**46**	**67**	0	**186**	15	76	**71**	**4**	**166**	10	**30**	6	0	46	**72**	44	13	0	129	**527**
04:45 PM	68	45	61	0	174	15	**82**	62	1	160	**13**	28	10	0	**51**	59	53	**18**	0	130	515
05:00 PM	**78**	37	61	0	176	15	68	56	0	139	13	23	7	0	43	51	38	15	**2**	106	464
Total Volume	283	163	233	0	679	65	307	237	5	614	46	110	33	0	189	249	195	55	2	501	1983
% App. Total	41.7	24	34.3	0		10.6	50	38.6	0.8		24.3	58.2	17.5	0		49.7	38.9	11	0.4		
PHF	.907	.886	.869	.000	.913	.813	.936	.835	.313	.925	.885	.917	.825	.000	.926	.865	.813	.764	.250	.921	.941



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File Name : AM_Kamehameha Ave – Maui Lani Pkwy
Site Code : 00000000
Start Date : 3/16/2017
Page No : 1

Groups Printed- Unshifted

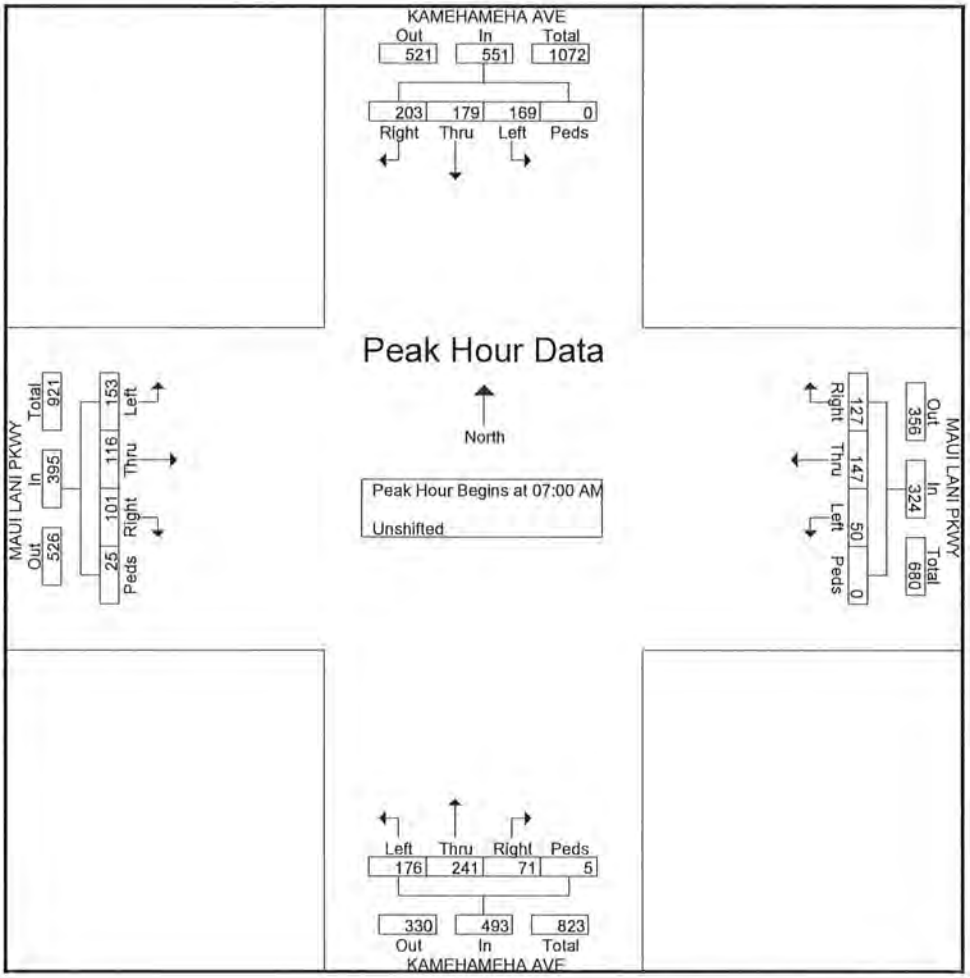
	MAUI LANI PKWY Eastbound				MAUI LANI PKWY Westbound				KAMEHAMEHA AVE Northbound				KAMEHAMEHA AVE Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	39	52	4	1	4	38	21	0	16	17	9	0	71	5	54	0	331
06:45 AM	49	39	11	8	12	53	25	0	19	20	11	0	53	21	51	0	372
Total	88	91	15	9	16	91	46	0	35	37	20	0	124	26	105	0	703
07:00 AM	35	30	33	4	15	34	23	0	42	38	18	1	58	44	50	0	425
07:15 AM	32	23	32	15	14	38	44	0	65	78	16	0	17	47	40	0	461
07:30 AM	41	29	28	4	16	27	29	0	38	72	22	0	31	67	32	0	436
07:45 AM	45	34	8	2	5	48	31	0	31	53	15	4	63	21	81	0	441
Total	153	116	101	25	50	147	127	0	176	241	71	5	169	179	203	0	1763
08:00 AM	43	37	4	0	3	52	22	0	14	17	8	0	47	11	45	0	303
08:15 AM	40	56	12	2	6	42	34	0	10	13	7	1	37	7	49	0	316
Grand Total	324	300	132	36	75	332	229	0	235	308	106	6	377	223	402	0	3085
Apprch %	40.9	37.9	16.7	4.5	11.8	52.2	36	0	35.9	47	16.2	0.9	37.6	22.3	40.1	0	
Total %	10.5	9.7	4.3	1.2	2.4	10.8	7.4	0	7.6	10	3.4	0.2	12.2	7.2	13	0	

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Site Code : 00000000
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	MAUI LANI PKWY Eastbound					MAUI LANI PKWY Westbound					KAMEHAMEHA AVE Northbound					KAMEHAMEHA AVE Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	35	30	**33**	4	**102**	15	34	23	0	72	42	38	18	1	99	58	44	50	0	152	425
07:15 AM	32	23	32	**15**	102	14	38	**44**	0	**96**	**65**	**78**	16	0	**159**	17	47	40	0	104	**461**
07:30 AM	41	29	28	4	102	**16**	27	29	0	72	38	72	**22**	0	132	31	**67**	32	0	130	436
07:45 AM	**45**	**34**	8	2	89	5	**48**	31	0	84	31	53	15	**4**	103	**63**	21	**81**	0	**165**	441
Total Volume	153	116	101	25	395	50	147	127	0	324	176	241	71	5	493	169	179	203	0	551	1763
% App. Total	38.7	29.4	25.6	6.3		15.4	45.4	39.2	0		35.7	48.9	14.4	1		30.7	32.5	36.8	0		
PHF	.850	.853	.765	.417	.968	.781	.766	.722	.000	.844	.677	.772	.807	.313	.775	.671	.668	.627	.000	.835	.956



AUSTIN TSUTSUMI & ASSOCIATES

501 Sumner Street, Suite 521
Honolulu, HI 96817
Phone: (808) 533-3646 Fax: (808) 526-1267

File Name : PM_Kamehameha Ave - Maui Lani Pkwy
Site Code : 00000000
Start Date : 3/16/2017
Page No : 1

Groups Printed- Unshifted

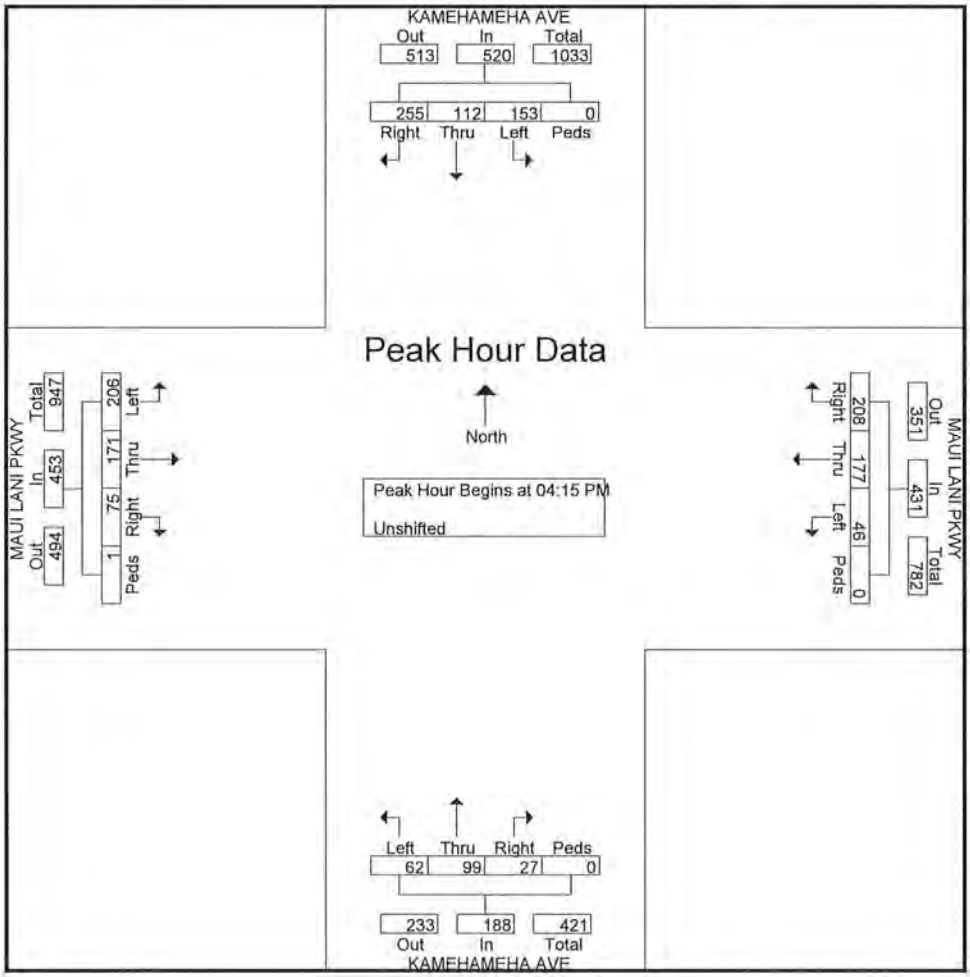
	MAUI LANI PKWY Eastbound				MAUI LANI PKWY Westbound				KAMEHAMEHA AVE Northbound				KAMEHAMEHA AVE Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	47	44	13	1	6	59	40	0	23	21	10	0	40	32	58	0	394
03:45 PM	46	43	14	1	12	47	45	0	24	26	8	0	34	35	71	0	406
Total	93	87	27	2	18	106	85	0	47	47	18	0	74	67	129	0	800
04:00 PM	44	43	21	3	12	46	48	0	18	35	9	0	33	32	67	0	411
04:15 PM	51	39	26	1	10	52	55	0	15	24	13	0	27	29	60	0	402
04:30 PM	52	46	15	0	14	40	50	0	17	26	8	0	30	24	71	0	393
04:45 PM	43	44	18	0	15	37	50	0	17	22	4	0	59	32	70	0	411
Total	190	172	80	4	51	175	203	0	67	107	34	0	149	117	268	0	1617
05:00 PM	60	42	16	0	7	48	53	0	13	27	2	0	37	27	54	0	386
05:15 PM	41	52	17	1	15	51	42	0	16	13	5	1	42	24	53	0	373
Grand Total	384	353	140	7	91	380	383	0	143	194	59	1	302	235	504	0	3176
Apprch %	43.4	39.9	15.8	0.8	10.7	44.5	44.8	0	36	48.9	14.9	0.3	29	22.6	48.4	0	
Total %	12.1	11.1	4.4	0.2	2.9	12	12.1	0	4.5	6.1	1.9	0	9.5	7.4	15.9	0	

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File Name : PM_Kamehameha Ave - Maui Lani Pkwy
Site Code : 00000000
Start Date : 3/16/2017
Page No : 2

	MAUI LANI PKWY Eastbound					MAUI LANI PKWY Westbound					KAMEHAMEHA AVE Northbound					KAMEHAMEHA AVE Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	51	39	**26**	**1**	117	10	**52**	**55**	0	**117**	15	24	**13**	0	**52**	27	29	60	0	116	402
04:30 PM	52	**46**	15	0	113	14	40	50	0	104	**17**	26	8	0	51	30	24	**71**	0	125	393
04:45 PM	43	44	18	0	105	**15**	37	50	0	102	17	22	4	0	43	**59**	**32**	70	0	**161**	**411**
05:00 PM	**60**	42	16	0	**118**	7	48	53	0	108	13	**27**	2	0	42	37	27	54	0	118	386
Total Volume	206	171	75	1	453	46	177	208	0	431	62	99	27	0	188	153	112	255	0	520	1592
% App. Total	45.5	37.7	16.6	0.2		10.7	41.1	48.3	0		33	52.7	14.4	0		29.4	21.5	49	0		
PHF	.858	.929	.721	.250	.960	.767	.851	.945	.000	.921	.912	.917	.519	.000	.904	.648	.875	.898	.000	.807	.968



Austin Tsutsumi & Associates

501 Sumner Street #521
Honolulu, HI 96817
Phone: (808) 533-3646 Fax: (808) 526-1267

File Name : Waiale Rd - Kaupo St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 1

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

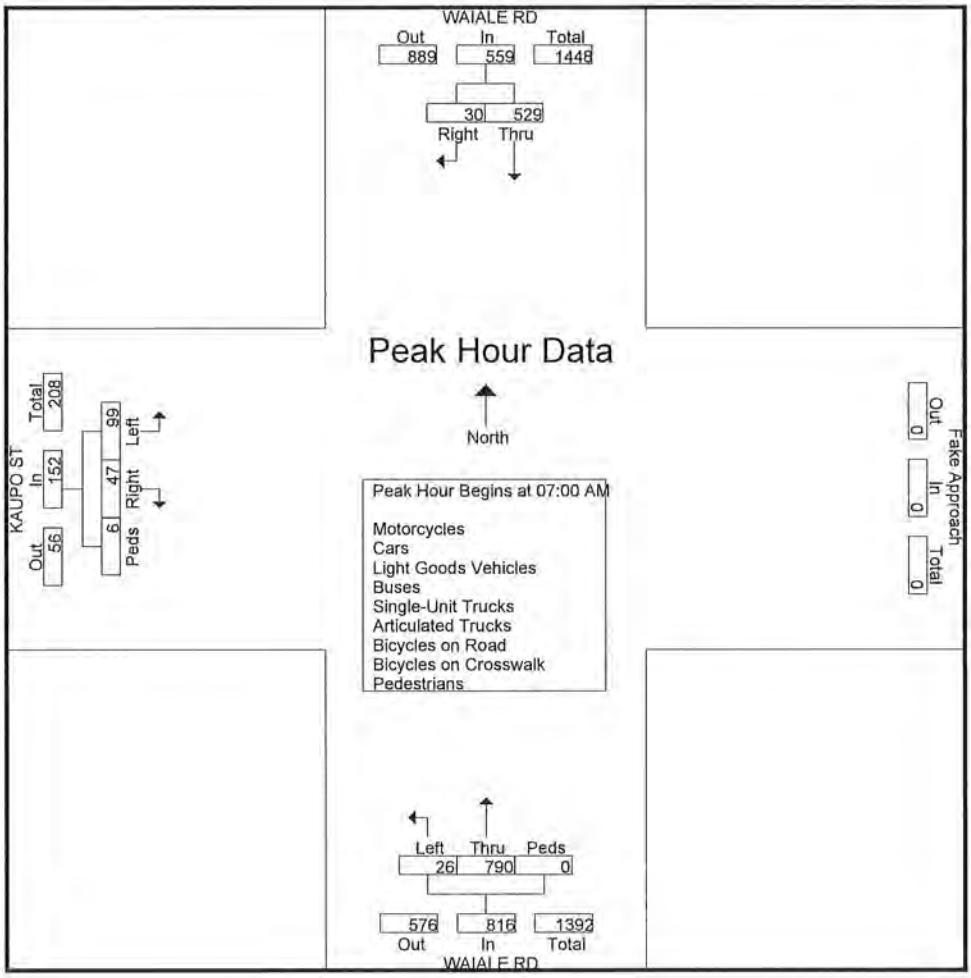
	WAIALE RD Southbound		WAIALE RD Northbound			KAUPO ST Eastbound			
Start Time	Thru	Right	Left	Thru	Peds	Left	Right	Peds	Int. Total
06:30 AM	95	4	9	167	0	21	10	1	307
06:45 AM	134	3	15	163	0	13	14	2	344
Total	229	7	24	330	0	34	24	3	651
07:00 AM	105	6	10	207	0	28	14	1	371
07:15 AM	142	16	6	207	0	28	12	2	413
07:30 AM	150	6	4	199	0	32	16	3	410
07:45 AM	132	2	6	177	0	11	5	0	333
Total	529	30	26	790	0	99	47	6	1527
08:00 AM	115	6	8	134	0	8	10	2	283
08:15 AM	82	3	7	124	0	8	15	2	241
Grand Total	955	46	65	1378	0	149	96	13	2702
Apprch %	95.4	4.6	4.5	95.5	0	57.8	37.2	5	
Total %	35.3	1.7	2.4	51	0	5.5	3.6	0.5	
Motorcycles	2	0	0	5	0	2	1	0	10
% Motorcycles	0.2	0	0	0.4	0	1.3	1	0	0.4
Cars	700	39	53	1152	0	113	59	0	2116
% Cars	73.3	84.8	81.5	83.6	0	75.8	61.5	0	78.3
Light Goods Vehicles	216	5	10	183	0	32	34	0	480
% Light Goods Vehicles	22.6	10.9	15.4	13.3	0	21.5	35.4	0	17.8
Buses	3	0	2	16	0	1	1	0	23
% Buses	0.3	0	3.1	1.2	0	0.7	1	0	0.9
Single-Unit Trucks	30	2	0	17	0	1	1	0	51
% Single-Unit Trucks	3.1	4.3	0	1.2	0	0.7	1	0	1.9
Articulated Trucks	3	0	0	2	0	0	0	0	5
% Articulated Trucks	0.3	0	0	0.1	0	0	0	0	0.2
Bicycles on Road	1	0	0	3	0	0	0	0	4
% Bicycles on Road	0.1	0	0	0.2	0	0	0	0	0.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	3	3
% Bicycles on Crosswalk	0	0	0	0	0	0	0	23.1	0.1
Pedestrians	0	0	0	0	0	0	0	10	10
% Pedestrians	0	0	0	0	0	0	0	76.9	0.4

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File Name : Waiale Rd - Kaupo St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 2

	WAIALE RD Southbound			WAIALE RD Northbound				KAUPO ST Eastbound				
Start Time	Thru	Right	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 07:00 AM												
07:00 AM	105	6	111	**10**	**207**	0	**217**	28	14	1	43	371
07:15 AM	142	**16**	**158**	6	207	0	213	28	12	2	42	**413**
07:30 AM	**150**	6	156	4	199	0	203	**32**	**16**	**3**	**51**	410
07:45 AM	132	2	134	6	177	0	183	11	5	0	16	333
Total Volume	529	30	559	26	790	0	816	99	47	6	152	1527
% App. Total	94.6	5.4		3.2	96.8	0		65.1	30.9	3.9		
PHF	.882	.469	.884	.650	.954	.000	.940	.773	.734	.500	.745	.924



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File Name : Waiale Rd - Kaupo St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 1

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

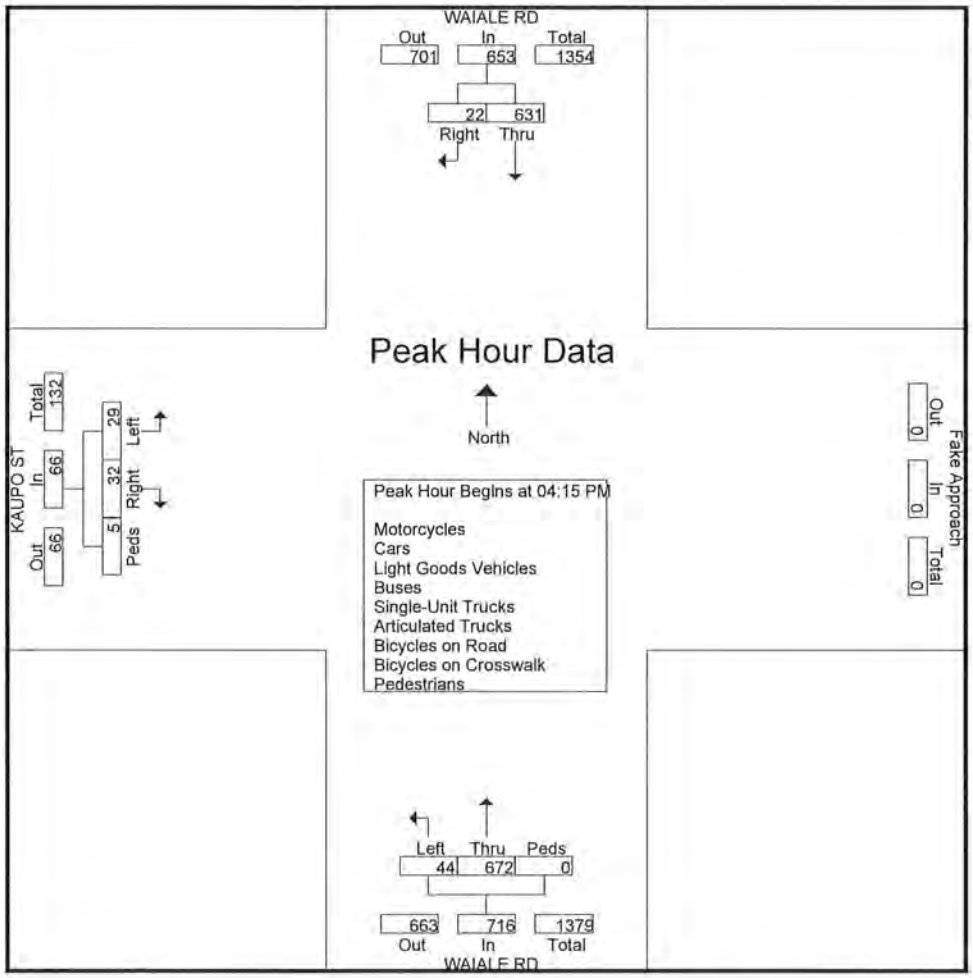
	WAIALE RD Southbound		WAIALE RD Northbound			KAUPO ST Eastbound			
Start Time	Thru	Right	Left	Thru	Peds	Left	Right	Peds	Int. Total
03:30 PM	140	11	14	161	0	4	7	2	339
03:45 PM	161	5	10	148	0	3	5	1	333
Total	301	16	24	309	0	7	12	3	672
04:00 PM	154	6	9	185	0	12	8	0	374
04:15 PM	152	7	13	191	0	8	9	0	380
04:30 PM	177	4	5	177	0	4	6	1	374
04:45 PM	159	4	16	135	0	5	8	1	328
Total	642	21	43	688	0	29	31	2	1456
05:00 PM	143	7	10	169	0	12	9	3	353
05:15 PM	122	5	14	140	0	4	13	0	298
Grand Total	1208	49	91	1306	0	52	65	8	2779
Apprch %	96.1	3.9	6.5	93.5	0	41.6	52	6.4	
Total %	43.5	1.8	3.3	47	0	1.9	2.3	0.3	
Motorcycles	4	0	1	2	0	0	0	0	7
% Motorcycles	0.3	0	1.1	0.2	0	0	0	0	0.3
Cars	938	37	69	932	0	41	44	0	2061
% Cars	77.6	75.5	75.8	71.4	0	78.8	67.7	0	74.2
Light Goods Vehicles	250	11	20	331	0	11	20	0	643
% Light Goods Vehicles	20.7	22.4	22	25.3	0	21.2	30.8	0	23.1
Buses	1	0	1	13	0	0	1	0	16
% Buses	0.1	0	1.1	1	0	0	1.5	0	0.6
Single-Unit Trucks	14	0	0	22	0	0	0	0	36
% Single-Unit Trucks	1.2	0	0	1.7	0	0	0	0	1.3
Articulated Trucks	0	0	0	6	0	0	0	0	6
% Articulated Trucks	0	0	0	0.5	0	0	0	0	0.2
Bicycles on Road	1	1	0	0	0	0	0	0	2
% Bicycles on Road	0.1	2	0	0	0	0	0	0	0.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	3	3
% Bicycles on Crosswalk	0	0	0	0	0	0	0	37.5	0.1
Pedestrians	0	0	0	0	0	0	0	5	5
% Pedestrians	0	0	0	0	0	0	0	62.5	0.2

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File Name : Waiale Rd - Kaupo St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 2

	WAIALE RD Southbound			WAIALE RD Northbound				KAUPO ST Eastbound				
Start Time	Thru	Right	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:15 PM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 04:15 PM												
04:15 PM	152	**7**	159	13	**191**	0	**204**	8	**9**	0	17	**380**
04:30 PM	**177**	4	**181**	5	177	0	182	4	6	1	11	374
04:45 PM	159	4	163	**16**	135	0	151	5	8	1	14	328
05:00 PM	143	7	150	10	169	0	179	**12**	9	**3**	**24**	353
Total Volume	631	22	653	44	672	0	716	29	32	5	66	1435
% App. Total	96.6	3.4		6.1	93.9	0		43.9	48.5	7.6		
PHF	.891	.786	.902	.688	.880	.000	.877	.604	.889	.417	.688	.944



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File Name : Waiale Rd - Olomea St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 1

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

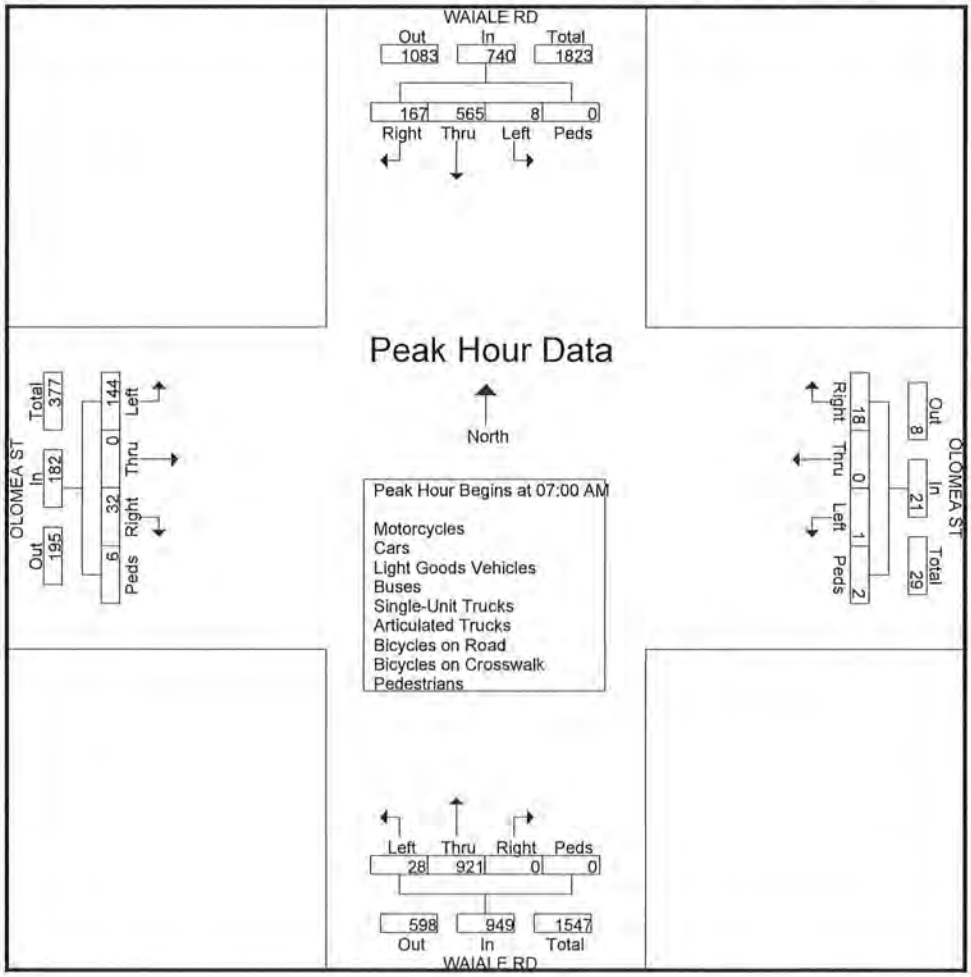
	WAIALE RD Southbound				OLOMEA ST Westbound				WAIALE RD Northbound				OLOMEA ST Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
05:00 AM	0	30	1	0	0	0	0	0	2	19	0	0	7	0	1	2	62
05:15 AM	1	30	2	0	0	0	0	0	0	20	0	0	6	0	2	0	61
05:30 AM	2	31	3	0	0	0	1	0	0	38	0	0	11	0	2	0	88
05:45 AM	0	40	5	0	0	0	0	0	0	65	0	0	14	0	1	1	126
Total	3	131	11	0	0	0	1	0	2	142	0	0	38	0	6	3	337
06:00 AM	1	56	3	0	0	0	1	0	0	70	0	0	17	0	1	2	151
06:15 AM	1	75	4	0	0	0	1	0	1	79	0	0	21	0	2	2	186
06:30 AM	1	88	8	0	1	0	2	0	2	116	0	0	24	0	5	0	247
06:45 AM	2	100	12	0	1	0	0	1	4	199	0	0	30	0	14	3	366
Total	5	319	27	0	2	0	4	1	7	464	0	0	92	0	22	7	950
07:00 AM	3	120	33	0	1	0	9	0	7	182	0	0	29	0	11	0	395
07:15 AM	1	129	45	0	0	0	4	0	6	254	0	0	31	0	5	2	477
07:30 AM	1	158	52	0	0	0	3	1	7	232	0	0	42	0	9	4	509
07:45 AM	3	158	37	0	0	0	2	1	8	253	0	0	42	0	7	0	511
Total	8	565	167	0	1	0	18	2	28	921	0	0	144	0	32	6	1892
08:00 AM	2	115	8	0	0	0	4	1	3	138	0	0	17	0	4	1	293
08:15 AM	3	86	13	0	0	0	1	0	7	141	0	0	31	0	7	1	290
08:30 AM	1	104	8	3	1	0	1	2	1	140	0	1	24	0	5	14	305
08:45 AM	3	106	8	0	1	0	3	1	2	189	0	0	31	0	1	4	349
Total	9	411	37	3	2	0	9	4	13	608	0	1	103	0	17	20	1237
Grand Total	25	1426	242	3	5	0	32	7	50	2135	0	1	377	0	77	36	4416
Apprch %	1.5	84.1	14.3	0.2	11.4	0	72.7	15.9	2.3	97.7	0	0	76.9	0	15.7	7.3	
Total %	0.6	32.3	5.5	0.1	0.1	0	0.7	0.2	1.1	48.3	0	0	8.5	0	1.7	0.8	
Motorcycles	0	3	0	0	0	0	0	0	0	11	0	0	3	0	0	0	17
% Motorcycles	0	0.2	0	0	0	0	0	0	0	0.5	0	0	0.8	0	0	0	0.4
Cars	19	931	187	0	3	0	23	0	28	1512	0	0	271	0	56	0	3030
% Cars	76	65.3	77.3	0	60	0	71.9	0	56	70.8	0	0	71.9	0	72.7	0	68.6
Light Goods Vehicles	4	416	52	0	2	0	7	0	13	556	0	0	97	0	20	0	1167
% Light Goods Vehicles	16	29.2	21.5	0	40	0	21.9	0	26	26	0	0	25.7	0	26	0	26.4
Buses	0	5	1	0	0	0	0	0	9	20	0	0	4	0	1	0	40
% Buses	0	0.4	0.4	0	0	0	0	0	18	0.9	0	0	1.1	0	1.3	0	0.9
Single-Unit Trucks	1	60	1	0	0	0	0	0	0	30	0	0	2	0	0	0	94
% Single-Unit Trucks	4	4.2	0.4	0	0	0	0	0	0	1.4	0	0	0.5	0	0	0	2.1
Articulated Trucks	1	10	1	0	0	0	1	0	0	3	0	0	0	0	0	0	16
% Articulated Trucks	4	0.7	0.4	0	0	0	3.1	0	0	0.1	0	0	0	0	0	0	0.4
Bicycles on Road	0	1	0	0	0	0	1	0	0	3	0	0	0	0	0	0	5
% Bicycles on Road	0	0.1	0	0	0	0	3.1	0	0	0.1	0	0	0	0	0	0	0.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.6	0
Pedestrians	0	0	0	3	0	0	0	7	0	0	0	1	0	0	0	34	45
% Pedestrians	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	94.4	1

Austin Tsutsumi & Associates

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File Name : Waiale Rd - Olomea St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 2

	WAIALE RD Southbound					OLOMEA ST Westbound					WAIALE RD Northbound					OLOMEA ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 05:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**3**	120	33	0	156	**1**	0	**9**	0	**10**	7	182	0	0	189	29	0	**11**	0	40	395
07:15 AM	1	129	45	0	175	0	0	4	0	4	6	**254**	0	0	260	31	0	5	2	38	477
07:30 AM	1	**158**	**52**	0	**211**	0	0	3	**1**	4	7	232	0	0	239	**42**	0	9	**4**	**55**	509
07:45 AM	3	158	37	0	198	0	0	2	1	3	**8**	253	0	0	**261**	42	0	7	0	49	**511**
Total Volume	8	565	167	0	740	1	0	18	2	21	28	921	0	0	949	144	0	32	6	182	1892
% App. Total	1.1	76.4	22.6	0		4.8	0	85.7	9.5		3	97	0	0		79.1	0	17.6	3.3		
PHF	.667	.894	.803	.000	.877	.250	.000	.500	.500	.525	.875	.906	.000	.000	.909	.857	.000	.727	.375	.827	.926



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File Name : Waiale Rd - Olomea St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 1

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

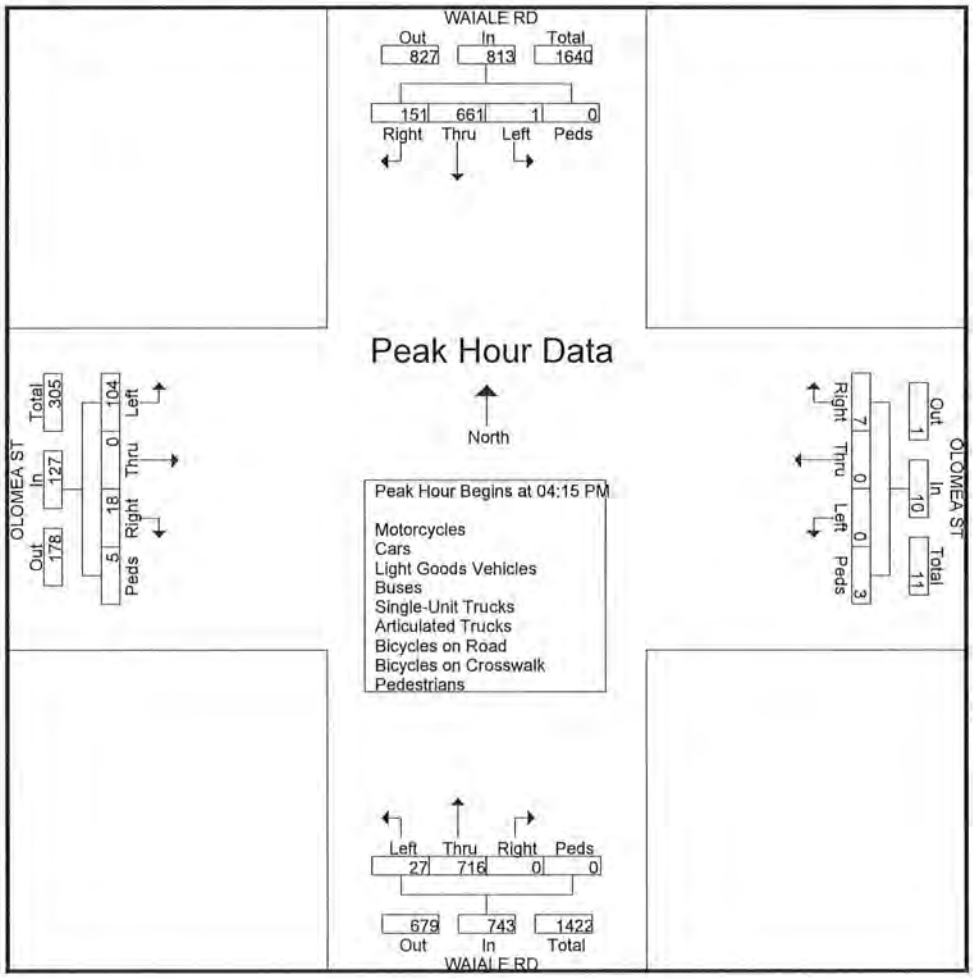
	WAIALE RD Southbound				OLOMEA ST Westbound				WAIALE RD Northbound				OLOMEA ST Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
02:00 PM	2	138	39	0	0	0	4	0	7	157	0	0	30	0	2	1	380
02:15 PM	0	165	29	0	0	0	2	0	7	135	0	0	24	1	4	11	378
02:30 PM	4	147	28	0	0	0	2	0	5	144	0	0	19	0	6	9	364
02:45 PM	0	135	23	0	0	1	3	0	6	138	0	0	16	0	2	3	327
Total	6	585	119	0	0	1	11	0	25	574	0	0	89	1	14	24	1449
03:00 PM	0	118	34	0	0	2	8	9	5	166	0	0	15	0	4	4	365
03:15 PM	0	139	29	0	0	0	4	1	6	158	1	0	21	0	0	3	362
03:30 PM	1	160	42	0	0	0	2	0	5	162	0	0	20	0	0	2	394
03:45 PM	0	146	33	0	1	0	0	2	6	152	0	0	25	0	4	0	369
Total	1	563	138	0	1	2	14	12	22	638	1	0	81	0	8	9	1490
04:00 PM	2	153	31	0	0	0	4	1	5	172	0	0	23	0	6	1	398
04:15 PM	0	166	35	0	0	0	4	0	9	204	0	0	24	0	3	3	448
04:30 PM	0	170	39	0	0	0	2	2	6	178	0	0	28	0	6	2	433
04:45 PM	1	166	35	0	0	0	0	0	7	176	0	0	17	0	6	0	408
Total	3	655	140	0	0	0	10	3	27	730	0	0	92	0	21	6	1687
05:00 PM	0	159	42	0	0	0	1	1	5	158	0	0	35	0	3	0	404
05:15 PM	0	153	35	0	0	0	2	0	3	164	1	0	12	0	1	1	372
05:30 PM	1	104	35	0	0	0	1	0	9	157	0	0	15	0	7	1	330
05:45 PM	2	104	28	0	0	0	1	0	8	129	0	0	20	0	10	0	302
Total	3	520	140	0	0	0	5	1	25	608	1	0	82	0	21	2	1408
Grand Total	13	2323	537	0	1	3	40	16	99	2550	2	0	344	1	64	41	6034
Apprch %	0.5	80.9	18.7	0	1.7	5	66.7	26.7	3.7	96.2	0.1	0	76.4	0.2	14.2	9.1	
Total %	0.2	38.5	8.9	0	0	0	0.7	0.3	1.6	42.3	0	0	5.7	0	1.1	0.7	
Motorcycles	0	14	4	0	0	0	0	0	0	7	0	0	1	0	0	0	26
% Motorcycles	0	0.6	0.7	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0.4
Cars	9	1705	404	0	0	0	25	0	63	1727	1	0	243	1	56	0	4234
% Cars	69.2	73.4	75.2	0	0	0	62.5	0	63.6	67.7	50	0	70.6	100	87.5	0	70.2
Light Goods Vehicles	4	567	125	0	1	3	14	0	26	739	1	0	98	0	8	0	1586
% Light Goods Vehicles	30.8	24.4	23.3	0	100	100	35	0	26.3	29	50	0	28.5	0	12.5	0	26.3
Buses	0	7	2	0	0	0	0	0	9	21	0	0	1	0	0	0	40
% Buses	0	0.3	0.4	0	0	0	0	0	9.1	0.8	0	0	0.3	0	0	0	0.7
Single-Unit Trucks	0	26	1	0	0	0	1	0	1	41	0	0	1	0	0	0	71
% Single-Unit Trucks	0	1.1	0.2	0	0	0	2.5	0	1	1.6	0	0	0.3	0	0	0	1.2
Articulated Trucks	0	2	0	0	0	0	0	0	0	14	0	0	0	0	0	0	16
% Articulated Trucks	0	0.1	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0.3
Bicycles on Road	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	4
% Bicycles on Road	0	0.1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	5
% Bicycles on Crosswalk	0	0	0	0	0	0	0	6.2	0	0	0	0	0	0	0	9.8	0.1
Pedestrians	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	37	52
% Pedestrians	0	0	0	0	0	0	0	93.8	0	0	0	0	0	0	0	90.2	0.9

Austin Tsutsumi & Associates

501 Sumner Street #521
Honolulu, HI 96817
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File Name : Waiale Rd - Olomea St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 2

	WAIALE RD Southbound					OLOMEA ST Westbound					WAIALE RD Northbound					OLOMEA ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	166	35	0	201	0	0	**4**	0	**4**	**9**	**204**	0	0	**213**	24	0	3	**3**	30	**448**
04:30 PM	0	**170**	39	0	**209**	0	0	2	**2**	4	6	178	0	0	184	28	0	**6**	2	36	433
04:45 PM	**1**	166	35	0	202	0	0	0	0	0	7	176	0	0	183	17	0	6	0	23	408
05:00 PM	0	159	**42**	0	201	0	0	1	1	2	5	158	0	0	163	**35**	0	3	0	**38**	404
Total Volume	1	661	151	0	813	0	0	7	3	10	27	716	0	0	743	104	0	18	5	127	1693
% App. Total	0.1	81.3	18.6	0		0	0	70	30		3.6	96.4	0	0		81.9	0	14.2	3.9		
PHF	.250	.972	.899	.000	.972	.000	.000	.438	.375	.625	.750	.877	.000	.000	.872	.743	.000	.750	.417	.836	.945



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Start Date : 2/1/2018
Page No : 1

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

	WAIALE RD Southbound				OLOMEA ST Westbound				WAIALE RD Northbound				OLOMEA ST Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
12:00 AM	0	13	3	0	0	0	0	0	0	5	0	0	1	0	0	0	22
12:15 AM	0	9	1	0	0	0	0	0	2	7	0	0	2	0	1	1	23
12:30 AM	0	7	2	0	0	0	1	0	1	4	0	0	0	0	1	0	16
12:45 AM	0	6	1	0	0	0	0	0	1	3	0	0	0	0	0	0	11
Total	0	35	7	0	0	0	1	0	4	19	0	0	3	0	2	1	72
01:00 AM	0	3	2	0	0	0	0	0	0	5	0	0	0	0	0	0	10
01:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	5
01:30 AM	0	2	0	0	0	0	0	0	0	6	0	0	1	0	0	0	9
01:45 AM	0	3	3	0	0	0	0	0	0	6	0	0	1	0	0	0	13
Total	0	8	5	0	0	0	0	0	0	21	0	0	3	0	0	0	37
02:00 AM	0	6	0	0	0	0	0	0	0	2	0	0	0	0	0	0	8
02:15 AM	0	6	2	0	0	0	0	0	0	3	0	0	0	0	0	0	11
02:30 AM	0	6	2	0	0	0	0	0	0	7	0	0	0	0	1	0	16
02:45 AM	0	3	0	0	0	0	0	0	0	8	0	0	0	0	0	0	11
Total	0	21	4	0	0	0	0	0	0	20	0	0	0	0	1	0	46
03:00 AM	0	7	2	0	0	0	0	0	0	4	0	0	1	0	0	0	14
03:15 AM	0	3	0	0	0	0	0	0	0	4	0	0	1	0	1	3	12
03:30 AM	0	6	0	0	0	0	0	0	0	2	0	0	3	0	0	0	11
03:45 AM	1	13	1	0	0	0	0	0	0	10	0	0	1	0	1	0	27
Total	1	29	3	0	0	0	0	0	0	20	0	0	6	0	2	3	64
04:00 AM	0	3	0	0	0	0	0	0	0	8	0	0	0	0	1	0	12
04:15 AM	0	13	3	0	0	0	0	0	0	5	0	0	1	0	0	0	22
04:30 AM	0	16	1	0	0	0	0	0	0	21	0	0	11	0	0	0	49
04:45 AM	0	17	1	0	0	0	1	0	0	20	0	1	4	0	2	2	48
Total	0	49	5	0	0	0	1	0	0	54	0	1	16	0	3	2	131
05:00 AM	0	30	1	0	0	0	0	0	2	19	0	0	7	0	1	2	62
05:15 AM	1	30	2	0	0	0	0	0	0	20	0	0	6	0	2	0	61
05:30 AM	2	31	3	0	0	0	1	0	0	38	0	0	11	0	2	0	88
05:45 AM	0	40	5	0	0	0	0	0	0	65	0	0	14	0	1	1	126
Total	3	131	11	0	0	0	1	0	2	142	0	0	38	0	6	3	337
06:00 AM	1	56	3	0	0	0	1	0	0	70	0	0	17	0	1	2	151
06:15 AM	1	75	4	0	0	0	1	0	1	79	0	0	21	0	2	2	186
06:30 AM	1	88	8	0	1	0	2	0	2	116	0	0	24	0	5	0	247
06:45 AM	2	100	12	0	1	0	0	1	4	199	0	0	30	0	14	3	366
Total	5	319	27	0	2	0	4	1	7	464	0	0	92	0	22	7	950
07:00 AM	3	120	33	0	1	0	9	0	7	182	0	0	29	0	11	0	395
07:15 AM	1	129	45	0	0	0	4	0	6	254	0	0	31	0	5	2	477
07:30 AM	1	158	52	0	0	0	3	1	7	232	0	0	42	0	9	4	509
07:45 AM	3	158	37	0	0	0	2	1	8	253	0	0	42	0	7	0	511
Total	8	565	167	0	1	0	18	2	28	921	0	0	144	0	32	6	1892
08:00 AM	2	115	8	0	0	0	4	1	3	138	0	0	17	0	4	1	293
08:15 AM	3	86	13	0	0	0	1	0	7	141	0	0	31	0	7	1	290
08:30 AM	1	104	8	3	1	0	1	2	1	140	0	1	24	0	5	14	305
08:45 AM	3	106	8	0	1	0	3	1	2	189	0	0	31	0	1	4	349
Total	9	411	37	3	2	0	9	4	13	608	0	1	103	0	17	20	1237
09:00 AM	4	112	8	0	0	0	1	0	3	114	0	2	15	0	3	7	269
09:15 AM	1	95	9	0	0	0	3	0	0	91	0	8	20	0	5	3	235
09:30 AM	1	112	9	0	0	0	0	0	3	125	0	4	16	0	6	12	288

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File Name : Waiale Rd - Olomea St
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Start Date : 2/1/2018

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

	WAIALE RD Southbound				OLOMEA ST Westbound				WAIALE RD Northbound				OLOMEA ST Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
09:45 AM	1	114	19	4	0	0	0	1	2	121	0	0	11	0	6	2	281
Total	7	433	45	4	0	0	4	1	8	451	0	14	62	0	20	24	1073
10:00 AM	0	107	5	0	0	0	4	0	1	121	0	0	10	0	1	0	249
10:15 AM	1	104	15	0	0	1	2	0	0	138	0	0	14	0	1	1	277
10:30 AM	1	101	18	0	0	0	2	0	4	108	0	0	15	0	0	1	250
10:45 AM	2	112	14	0	0	0	2	1	5	118	0	0	19	0	4	3	280
Total	4	424	52	0	0	1	10	1	10	485	0	0	58	0	6	5	1056
11:00 AM	0	101	25	0	0	0	3	0	2	119	0	0	16	0	2	0	268
11:15 AM	2	121	13	0	0	0	0	0	0	132	0	0	10	0	0	0	278
11:30 AM	2	106	18	0	0	0	1	0	6	113	0	0	10	0	1	0	257
11:45 AM	1	134	21	0	0	0	1	0	2	100	0	0	20	0	8	0	287
Total	5	462	77	0	0	0	5	0	10	464	0	0	56	0	11	0	1090
12:00 PM	1	128	30	0	0	1	5	0	4	123	0	0	15	0	3	1	311
12:15 PM	0	112	24	0	1	0	0	0	2	143	0	0	10	0	0	2	294
12:30 PM	2	123	21	0	0	0	0	0	4	126	0	0	10	0	2	0	288
12:45 PM	5	109	17	0	1	0	1	0	7	136	0	0	20	1	2	1	300
Total	8	472	92	0	2	1	6	0	17	528	0	0	55	1	7	4	1193
01:00 PM	2	129	21	0	0	1	1	0	2	131	0	0	13	0	6	0	306
01:15 PM	0	122	22	0	0	0	2	0	2	152	0	0	16	0	3	0	319
01:30 PM	0	134	29	0	2	0	0	0	4	149	0	0	13	0	3	1	335
01:45 PM	3	119	38	0	0	0	4	1	1	150	0	0	17	0	6	1	340
Total	5	504	110	0	2	1	7	1	9	582	0	0	59	0	18	2	1300
02:00 PM	2	138	39	0	0	0	4	0	7	157	0	0	30	0	2	1	380
02:15 PM	0	165	29	0	0	0	2	0	7	135	0	0	24	1	4	11	378
02:30 PM	4	147	28	0	0	0	2	0	5	144	0	0	19	0	6	9	364
02:45 PM	0	135	23	0	0	1	3	0	6	138	0	0	16	0	2	3	327
Total	6	585	119	0	0	1	11	0	25	574	0	0	89	1	14	24	1449
03:00 PM	0	118	34	0	0	2	8	9	5	166	0	0	15	0	4	4	365
03:15 PM	0	139	29	0	0	0	4	1	6	158	1	0	21	0	0	3	362
03:30 PM	1	160	42	0	0	0	2	0	5	162	0	0	20	0	0	2	394
03:45 PM	0	146	33	0	1	0	0	2	6	152	0	0	25	0	4	0	369
Total	1	563	138	0	1	2	14	12	22	638	1	0	81	0	8	9	1490
04:00 PM	2	153	31	0	0	0	4	1	5	172	0	0	23	0	6	1	398
04:15 PM	0	166	35	0	0	0	4	0	9	204	0	0	24	0	3	3	448
04:30 PM	0	170	39	0	0	0	2	2	6	178	0	0	28	0	6	2	433
04:45 PM	1	166	35	0	0	0	0	0	7	176	0	0	17	0	6	0	408
Total	3	655	140	0	0	0	10	3	27	730	0	0	92	0	21	6	1687
05:00 PM	0	159	42	0	0	0	1	1	5	158	0	0	35	0	3	0	404
05:15 PM	0	153	35	0	0	0	2	0	3	164	1	0	12	0	1	1	372
05:30 PM	1	104	35	0	0	0	1	0	9	157	0	0	15	0	7	1	330
05:45 PM	2	104	28	0	0	0	1	0	8	129	0	0	20	0	10	0	302
Total	3	520	140	0	0	0	5	1	25	608	1	0	82	0	21	2	1408
06:00 PM	1	125	35	0	0	0	0	0	8	114	0	0	17	0	0	0	300
06:15 PM	1	97	34	0	0	0	0	0	3	127	0	0	29	0	5	0	296
06:30 PM	0	103	35	0	2	0	0	0	4	130	0	0	16	0	5	0	295
06:45 PM	0	83	23	0	0	0	0	0	8	131	0	1	19	0	2	0	267
Total	2	408	127	0	2	0	0	0	23	502	0	1	81	0	12	0	1158
07:00 PM	1	86	31	0	1	0	0	0	6	71	0	0	12	0	2	1	211
07:15 PM	0	82	18	0	0	0	1	0	7	73	0	0	16	0	1	1	199
07:30 PM	0	60	10	0	0	0	0	0	2	54	0	0	11	0	1	0	138

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Start Date : 2/1/2018
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Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

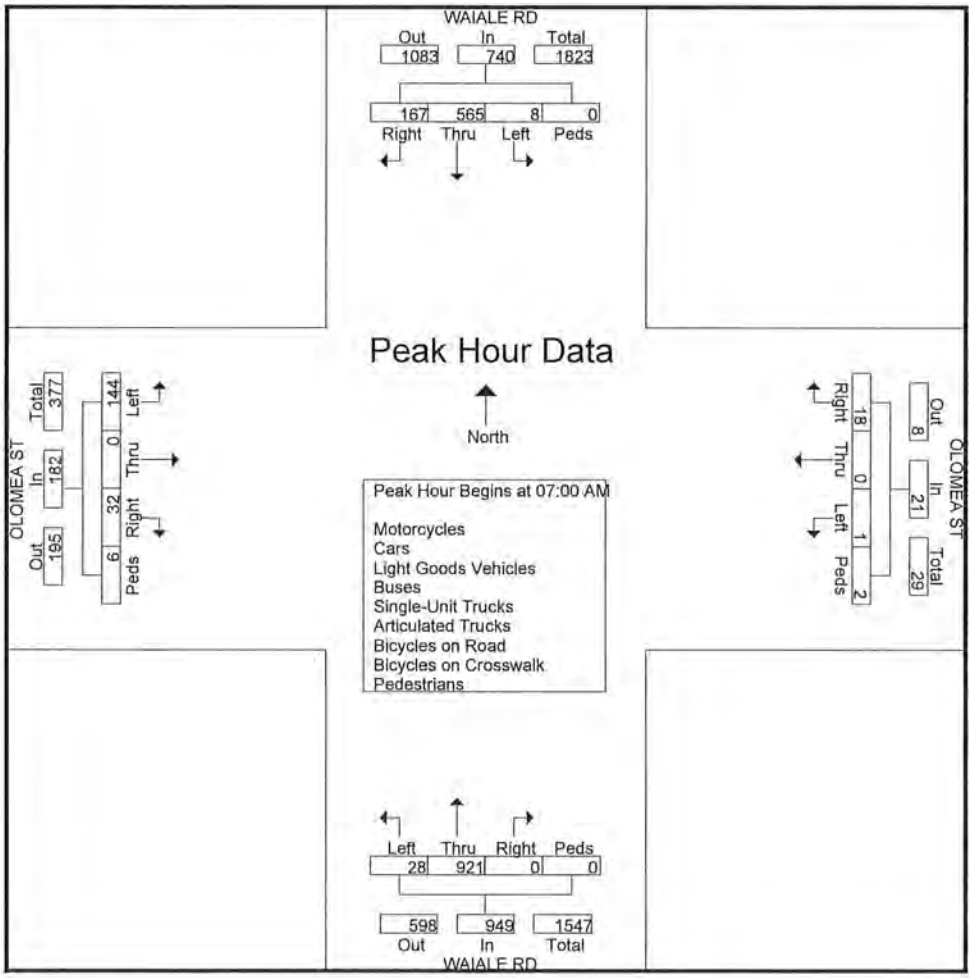
	WAIALE RD Southbound				OLOMEA ST Westbound				WAIALE RD Northbound				OLOMEA ST Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:45 PM	0	61	18	0	0	0	3	0	9	50	0	0	6	0	4	2	153
Total	1	289	77	0	1	0	4	0	24	248	0	0	45	0	8	4	701
08:00 PM	0	74	14	0	0	0	2	0	9	52	0	0	12	0	1	0	164
08:15 PM	0	63	15	0	0	0	0	0	3	57	0	0	6	0	3	0	147
08:30 PM	0	79	13	0	0	0	0	0	1	53	0	0	4	0	1	0	151
08:45 PM	0	60	15	0	0	0	0	0	4	32	0	0	8	0	2	0	121
Total	0	276	57	0	0	0	2	0	17	194	0	0	30	0	7	0	583
09:00 PM	0	47	13	0	1	0	2	0	4	41	0	0	6	0	0	0	114
09:15 PM	0	48	21	0	0	0	0	0	3	50	0	0	7	0	1	0	130
09:30 PM	0	47	12	0	0	0	0	0	2	36	0	0	6	0	0	0	103
09:45 PM	0	29	12	0	0	0	1	0	3	37	0	0	6	0	0	0	88
Total	0	171	58	0	1	0	3	0	12	164	0	0	25	0	1	0	435
10:00 PM	0	26	9	0	0	0	0	0	1	25	0	0	3	0	0	0	64
10:15 PM	0	32	6	0	0	0	0	0	1	18	0	0	1	0	2	0	60
10:30 PM	0	38	6	0	0	0	0	0	0	24	0	0	6	0	1	0	75
10:45 PM	2	16	11	0	0	1	3	0	0	22	0	0	7	0	3	0	65
Total	2	112	32	0	0	1	3	0	2	89	0	0	17	0	6	0	264
11:00 PM	0	18	5	0	4	0	14	0	0	18	0	0	1	0	0	0	60
11:15 PM	0	16	4	0	0	0	1	0	0	22	0	0	2	0	0	0	45
11:30 PM	0	20	7	0	0	0	0	0	0	11	0	0	2	0	1	0	41
11:45 PM	0	21	5	0	0	0	0	0	0	11	0	0	2	0	1	0	40
Total	0	75	21	0	4	0	15	0	0	62	0	0	7	0	2	0	186
Grand Total	73	7517	1551	7	18	7	133	26	285	8588	2	17	1244	2	247	122	19839
Apprch %	0.8	82.2	17	0.1	9.8	3.8	72.3	14.1	3.2	96.6	0	0.2	77	0.1	15.3	7.6	
Total %	0.4	37.9	7.8	0	0.1	0	0.7	0.1	1.4	43.3	0	0.1	6.3	0	1.2	0.6	
Motorcycles	0	32	9	0	0	0	0	0	0	32	0	0	8	0	0	0	81
% Motorcycles	0	0.4	0.6	0	0	0	0	0	0	0.4	0	0	0.6	0	0	0	0.4
Cars	44	5405	1185	0	13	3	75	0	183	6041	1	0	898	1	196	0	14045
% Cars	60.3	71.9	76.4	0	72.2	42.9	56.4	0	64.2	70.3	50	0	72.2	50	79.4	0	70.8
Light Goods Vehicles	24	1888	341	0	5	4	51	0	64	2287	1	0	326	1	50	0	5042
% Light Goods Vehicles	32.9	25.1	22	0	27.8	57.1	38.3	0	22.5	26.6	50	0	26.2	50	20.2	0	25.4
Buses	0	23	7	0	0	0	0	0	36	56	0	0	6	0	1	0	129
% Buses	0	0.3	0.5	0	0	0	0	0	12.6	0.7	0	0	0.5	0	0.4	0	0.7
Single-Unit Trucks	4	150	5	0	0	0	5	0	2	142	0	0	6	0	0	0	314
% Single-Unit Trucks	5.5	2	0.3	0	0	0	3.8	0	0.7	1.7	0	0	0.5	0	0	0	1.6
Articulated Trucks	1	14	2	0	0	0	1	0	0	24	0	0	0	0	0	0	42
% Articulated Trucks	1.4	0.2	0.1	0	0	0	0.8	0	0	0.3	0	0	0	0	0	0	0.2
Bicycles on Road	0	5	2	0	0	0	1	0	0	6	0	0	0	0	0	0	14
% Bicycles on Road	0	0.1	0.1	0	0	0	0.8	0	0	0.1	0	0	0	0	0	0	0.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	9	10
% Bicycles on Crosswalk	0	0	0	0	0	0	0	3.8	0	0	0	0	0	0	0	7.4	0.1
Pedestrians	0	0	0	7	0	0	0	25	0	0	0	17	0	0	0	113	162
% Pedestrians	0	0	0	100	0	0	0	96.2	0	0	0	100	0	0	0	92.6	0.8

Austin Tsutsumi & Associates

501 Sumner Street #521
Honolulu, HI 96817
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File Name : Waiale Rd - Olomea St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 4

	WAIALE RD Southbound					OLOMEA ST Westbound					WAIALE RD Northbound					OLOMEA ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 AM to 11:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**3**	120	33	0	156	**1**	0	**9**	0	**10**	7	182	0	0	189	29	0	**11**	0	40	395
07:15 AM	1	129	45	0	175	0	0	4	0	4	6	**254**	0	0	260	31	0	5	2	38	477
07:30 AM	1	**158**	**52**	0	**211**	0	0	3	**1**	4	7	232	0	0	239	**42**	0	9	**4**	**55**	509
07:45 AM	3	158	37	0	198	0	0	2	1	3	**8**	253	0	0	**261**	42	0	7	0	49	**511**
Total Volume	8	565	167	0	740	1	0	18	2	21	28	921	0	0	949	144	0	32	6	182	1892
% App. Total	1.1	76.4	22.6	0		4.8	0	85.7	9.5		3	97	0	0		79.1	0	17.6	3.3		
PHF	.667	.894	.803	.000	.877	.250	.000	.500	.500	.525	.875	.906	.000	.000	.909	.857	.000	.727	.375	.827	.926



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501 Sumner Street, Suite 521
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File Name : AM_Waiale Rd - Waiinu Rd
Site Code : 00000000
Start Date : 3/15/2017
Page No : 1

Groups Printed- Unshifted - Bank 1

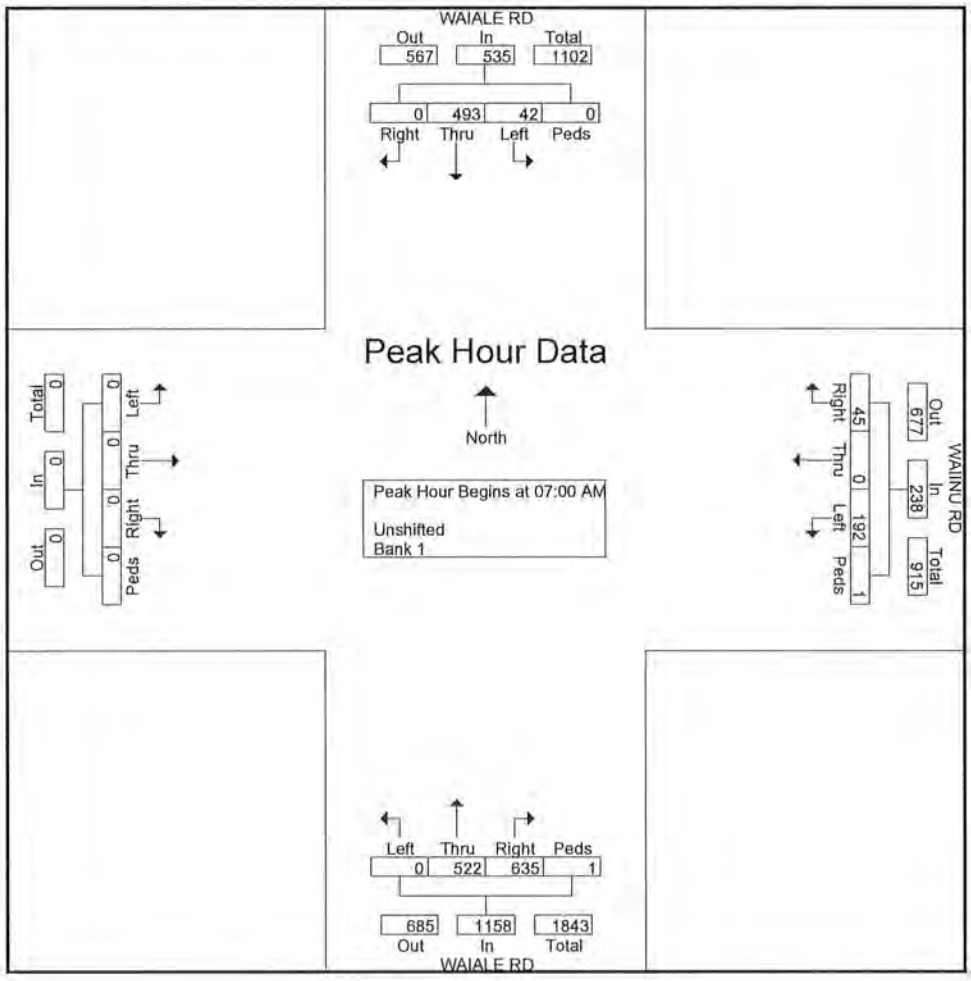
	WAIALE RD Southbound				WAIINU RD Westbound				WAIALE RD Northbound				Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	14	69	1	0	28	0	11	0	0	63	75	0	1	0	0	0	262
06:45 AM	8	96	0	0	55	0	6	0	1	93	162	1	0	0	0	0	422
Total	22	165	1	0	83	0	17	0	1	156	237	1	1	0	0	0	684
07:00 AM	14	100	0	0	50	0	7	0	0	117	123	0	0	0	0	0	411
07:15 AM	6	140	0	0	41	0	12	0	0	120	166	0	0	0	0	0	485
07:30 AM	13	122	0	0	53	0	19	1	0	149	182	0	0	0	0	0	539
07:45 AM	9	131	0	0	48	0	7	0	0	136	164	1	0	0	0	0	496
Total	42	493	0	0	192	0	45	1	0	522	635	1	0	0	0	0	1931
08:00 AM	17	97	0	0	54	0	12	1	0	101	80	1	0	0	0	0	363
08:15 AM	5	84	0	0	43	0	13	1	0	105	90	0	0	0	0	0	341
Grand Total	86	839	1	0	372	0	87	3	1	884	1042	3	1	0	0	0	3319
Apprch %	9.3	90.6	0.1	0	80.5	0	18.8	0.6	0.1	45.8	54	0.2	100	0	0	0	
Total %	2.6	25.3	0	0	11.2	0	2.6	0.1	0	26.6	31.4	0.1	0	0	0	0	
Unshifted	86	839	1	0	372	0	87	3	1	884	1042	3	1	0	0	0	3319
% Unshifted	100	100	100	0	100	0	100	100	100	100	100	100	100	0	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : AM_Waiale Rd - Waiinu Rd
Site Code : 00000000
Start Date : 3/15/2017
Page No : 2

	WAIALE RD Southbound					WAIINU RD Westbound					WAIALE RD Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**14**	100	0	0	114	50	0	7	0	57	0	117	123	0	240	0	0	0	0	0	411
07:15 AM	6	**140**	0	0	**146**	41	0	12	0	53	0	120	166	0	286	0	0	0	0	0	485
07:30 AM	13	122	0	0	135	**53**	0	**19**	**1**	**73**	0	**149**	**182**	0	**331**	0	0	0	0	0	**539**
07:45 AM	9	131	0	0	140	48	0	7	0	55	0	136	164	**1**	301	0	0	0	0	0	496
Total Volume	42	493	0	0	535	192	0	45	1	238	0	522	635	1	1158	0	0	0	0	0	1931
% App. Total	7.9	92.1	0	0		80.7	0	18.9	0.4		0	45.1	54.8	0.1		0	0	0	0		
PHF	.750	.880	.000	.000	.916	.906	.000	.592	.250	.815	.000	.876	.872	.250	.875	.000	.000	.000	.000	.000	.896



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File Name : PM_Waiale Rd - Waiinu Rd
Site Code : 00000000
Start Date : 3/15/2017
Page No : 1

Groups Printed- Unshifted - Bank 1

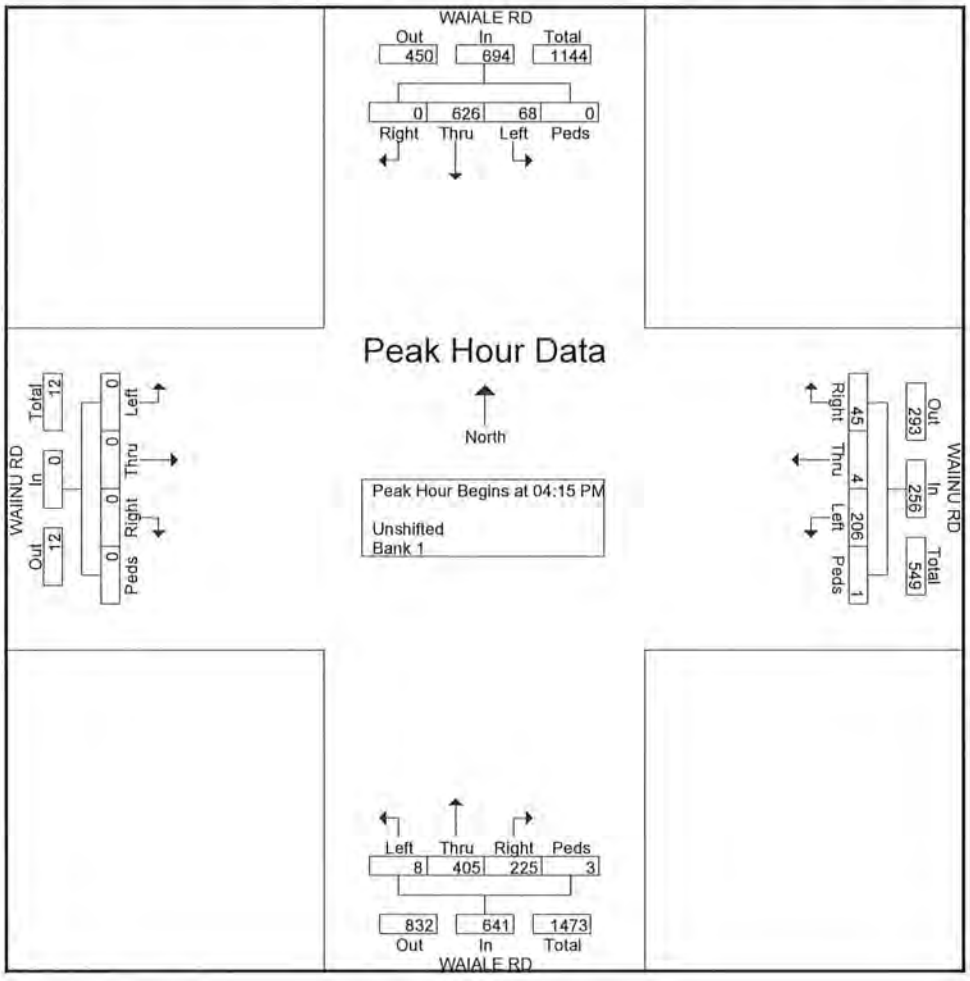
	WAIALE RD Southbound				WAIINU RD Westbound				WAIALE RD Northbound				WAIINU RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	15	148	0	0	47	0	2	0	0	123	44	2	0	0	0	0	381
03:45 PM	27	141	0	0	43	0	8	0	0	110	42	0	0	0	0	0	371
Total	42	289	0	0	90	0	10	0	0	233	86	2	0	0	0	0	752
04:00 PM	14	146	0	0	38	1	19	0	0	106	46	0	0	0	0	0	370
04:15 PM	13	137	0	0	54	1	14	0	6	115	51	0	0	0	0	0	391
04:30 PM	24	182	0	0	42	0	9	0	1	99	52	0	0	0	0	0	409
04:45 PM	17	143	0	0	48	2	7	1	0	109	59	0	0	0	0	0	386
Total	68	608	0	0	182	4	49	1	7	429	208	0	0	0	0	0	1556
05:00 PM	14	164	0	0	62	1	15	0	1	82	63	3	0	0	0	0	405
05:15 PM	20	147	0	0	46	1	11	0	0	92	65	3	0	0	0	0	385
Grand Total	144	1208	0	0	380	6	85	1	8	836	422	8	0	0	0	0	3098
Apprch %	10.7	89.3	0	0	80.5	1.3	18	0.2	0.6	65.6	33.1	0.6	0	0	0	0	
Total %	4.6	39	0	0	12.3	0.2	2.7	0	0.3	27	13.6	0.3	0	0	0	0	
Unshifted	144	1208	0	0	380	6	85	1	8	836	422	8	0	0	0	0	3098
% Unshifted	100	100	0	0	100	100	100	100	100	100	100	100	0	0	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : PM_Waiale Rd - Waiinu Rd
Site Code : 00000000
Start Date : 3/15/2017
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	WAIALE RD Southbound					WAIINU RD Westbound					WAIALE RD Northbound					WAIINU RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	13	137	0	0	150	54	1	14	0	69	**6**	**115**	51	0	**172**	0	0	0	0	0	391
04:30 PM	**24**	**182**	0	0	**206**	42	0	9	0	51	1	99	52	0	152	0	0	0	0	0	**409**
04:45 PM	17	143	0	0	160	48	**2**	7	**1**	58	0	109	59	0	168	0	0	0	0	0	386
05:00 PM	14	164	0	0	178	**62**	1	**15**	0	**78**	1	82	**63**	**3**	149	0	0	0	0	0	405
Total Volume	68	626	0	0	694	206	4	45	1	256	8	405	225	3	641	0	0	0	0	0	1591
% App. Total	9.8	90.2	0	0		80.5	1.6	17.6	0.4		1.2	63.2	35.1	0.5		0	0	0	0		
PHF	.708	.860	.000	.000	.842	.831	.500	.750	.250	.821	.333	.880	.893	.250	.932	.000	.000	.000	.000	.000	.972



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File Name : Waiale Rd - Kaohu St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 1

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

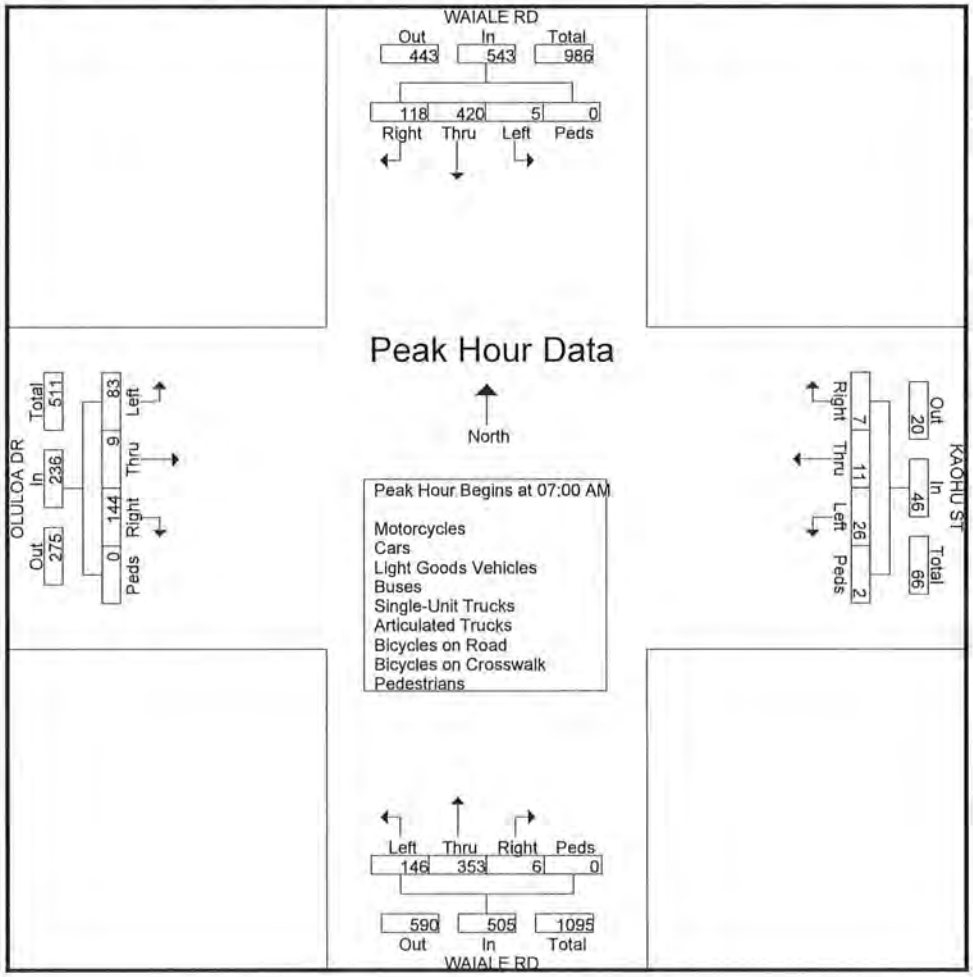
	WAIALE RD Southbound				KAOHU ST Westbound				WAIALE RD Northbound				OLULOA DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
05:00 AM	0	21	1	0	2	0	0	0	2	10	0	0	5	0	3	0	44
05:15 AM	1	21	1	0	2	0	0	0	5	10	1	0	0	0	0	0	41
05:30 AM	0	27	0	0	0	0	0	0	3	16	0	0	1	0	2	0	49
05:45 AM	0	34	2	0	2	0	0	0	5	17	0	0	1	0	1	0	62
Total	1	103	4	0	6	0	0	0	15	53	1	0	7	0	6	0	196
06:00 AM	0	40	4	0	3	0	1	0	4	25	0	0	2	0	2	0	81
06:15 AM	1	56	2	0	4	1	0	0	7	39	1	0	2	0	1	0	114
06:30 AM	0	66	18	0	2	5	1	0	14	37	0	0	3	0	8	0	154
06:45 AM	1	74	29	0	2	2	1	0	22	55	3	0	5	0	7	0	201
Total	2	236	53	0	11	8	3	0	47	156	4	0	12	0	18	0	550
07:00 AM	1	79	26	0	6	2	1	2	35	71	1	0	18	1	28	0	271
07:15 AM	0	107	40	0	8	3	1	0	43	80	0	0	21	2	48	0	353
07:30 AM	3	114	37	0	5	5	3	0	47	84	1	0	21	5	46	0	371
07:45 AM	1	120	15	0	7	1	2	0	21	118	4	0	23	1	22	0	335
Total	5	420	118	0	26	11	7	2	146	353	6	0	83	9	144	0	1330
08:00 AM	0	85	11	0	0	1	2	0	16	83	1	0	15	0	16	0	230
08:15 AM	2	67	10	0	1	4	1	0	16	85	1	0	3	2	17	0	209
08:30 AM	0	79	10	0	2	0	2	0	20	70	2	0	3	1	8	0	197
08:45 AM	1	70	7	0	4	1	0	2	15	98	4	0	1	0	23	0	226
Total	3	301	38	0	7	6	5	2	67	336	8	0	22	3	64	0	862
Grand Total	11	1060	213	0	50	25	15	4	275	898	19	0	124	12	232	0	2938
Apprch %	0.9	82.6	16.6	0	53.2	26.6	16	4.3	23.1	75.3	1.6	0	33.7	3.3	63	0	
Total %	0.4	36.1	7.2	0	1.7	0.9	0.5	0.1	9.4	30.6	0.6	0	4.2	0.4	7.9	0	
Motorcycles	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	10
% Motorcycles	0	0.5	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0.3
Cars	5	762	154	0	39	17	11	0	208	622	13	0	76	4	162	0	2073
% Cars	45.5	71.9	72.3	0	78	68	73.3	0	75.6	69.3	68.4	0	61.3	33.3	69.8	0	70.6
Light Goods Vehicles	6	248	49	0	10	6	4	0	58	241	5	0	36	7	61	0	731
% Light Goods Vehicles	54.5	23.4	23	0	20	24	26.7	0	21.1	26.8	26.3	0	29	58.3	26.3	0	24.9
Buses	0	2	6	0	0	0	0	0	6	9	0	0	0	0	1	0	24
% Buses	0	0.2	2.8	0	0	0	0	0	2.2	1	0	0	0	0	0.4	0	0.8
Single-Unit Trucks	0	38	4	0	1	2	0	0	3	21	0	0	12	1	5	0	87
% Single-Unit Trucks	0	3.6	1.9	0	2	8	0	0	1.1	2.3	0	0	9.7	8.3	2.2	0	3
Articulated Trucks	0	4	0	0	0	0	0	0	0	0	0	0	0	0	3	0	7
% Articulated Trucks	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	1.3	0	0.2
Bicycles on Road	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
% Bicycles on Road	0	0.1	0	0	0	0	0	0	0	0	5.3	0	0	0	0	0	0.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
% Pedestrians	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0.1

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File Name : Waiale Rd - Kaohu St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 2

	WAIALE RD Southbound					KAOHU ST Westbound					WAIALE RD Northbound					OLULOA DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 05:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	79	26	0	106	6	2	1	**2**	11	35	71	1	0	107	18	1	28	0	47	271
07:15 AM	0	107	**40**	0	147	**8**	3	1	0	12	43	80	0	0	123	21	2	**48**	0	71	353
07:30 AM	**3**	114	37	0	**154**	5	**5**	**3**	0	**13**	**47**	84	1	0	132	21	**5**	46	0	**72**	**371**
07:45 AM	1	**120**	15	0	136	7	1	2	0	10	21	**118**	**4**	0	**143**	**23**	1	22	0	46	335
Total Volume	5	420	118	0	543	26	11	7	2	46	146	353	6	0	505	83	9	144	0	236	1330
% App. Total	0.9	77.3	21.7	0		56.5	23.9	15.2	4.3		28.9	69.9	1.2	0		35.2	3.8	61	0		
PHF	.417	.875	.738	.000	.881	.813	.550	.583	.250	.885	.777	.748	.375	.000	.883	.902	.450	.750	.000	.819	.896



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Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

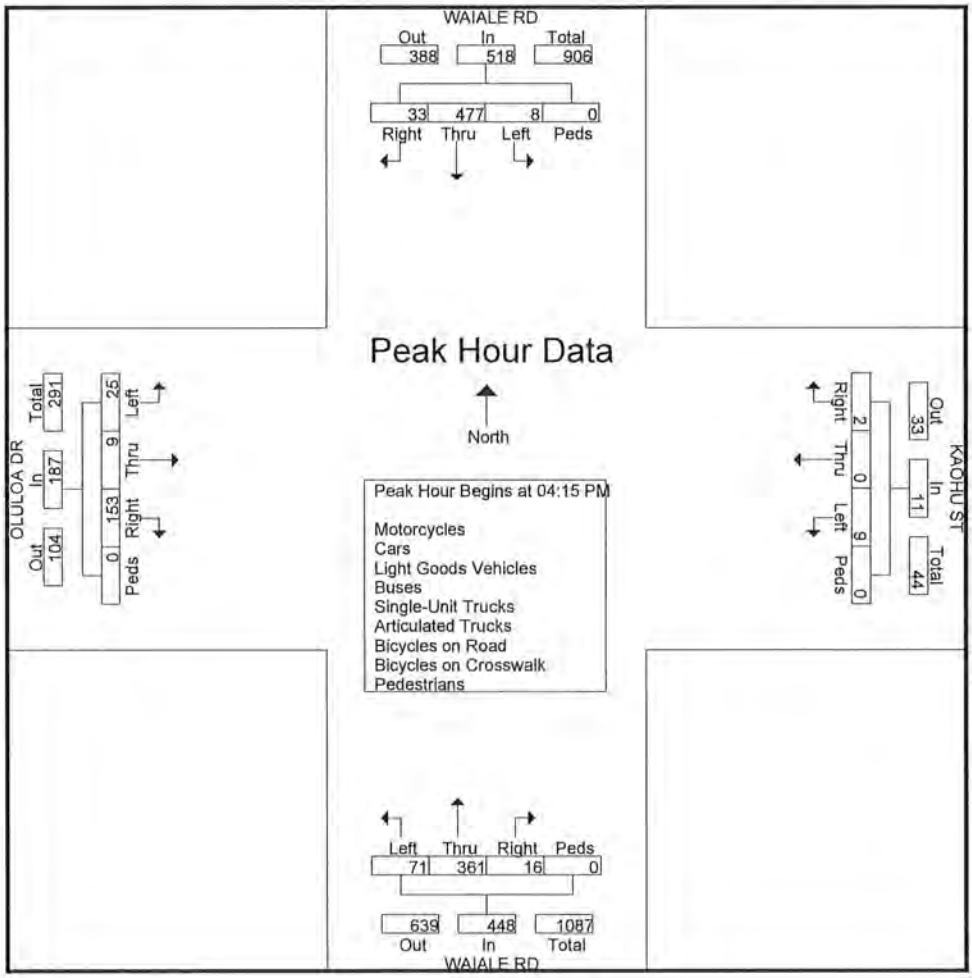
	WAIALE RD Southbound				KAOHU ST Westbound				WAIALE RD Northbound				OLULOA DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
02:00 PM	0	104	23	0	5	2	0	0	31	82	0	0	16	8	41	0	312
02:15 PM	0	117	15	0	5	1	2	0	25	77	3	0	29	5	61	0	340
02:30 PM	0	100	13	0	1	0	0	0	26	83	3	0	19	1	30	0	276
02:45 PM	0	111	14	0	1	0	0	0	16	93	2	0	5	2	16	0	260
Total	0	432	65	0	12	3	2	0	98	335	8	0	69	16	148	0	1188
03:00 PM	2	115	5	0	5	1	2	2	17	79	1	0	11	2	12	0	254
03:15 PM	0	117	3	0	1	0	3	0	19	75	3	0	8	0	12	0	241
03:30 PM	2	109	5	0	4	0	1	1	20	107	2	0	20	3	37	0	311
03:45 PM	3	116	9	0	0	0	1	0	23	96	3	0	15	3	17	0	286
Total	7	457	22	0	10	1	7	3	79	357	9	0	54	8	78	0	1092
04:00 PM	1	102	10	1	2	2	3	0	18	103	0	1	11	3	24	1	282
04:15 PM	0	120	11	0	1	0	1	0	17	112	1	0	6	4	38	0	311
04:30 PM	2	126	9	0	3	0	0	0	22	98	3	0	7	2	61	0	333
04:45 PM	3	119	10	0	2	0	0	0	7	83	5	0	6	1	30	0	266
Total	6	467	40	1	8	2	4	0	64	396	9	1	30	10	153	1	1192
05:00 PM	3	112	3	0	3	0	1	0	25	68	7	0	6	2	24	0	254
05:15 PM	3	113	5	0	4	0	0	0	11	77	1	0	9	1	21	0	245
05:30 PM	5	97	10	0	0	0	0	0	6	70	5	0	3	1	9	0	206
05:45 PM	2	78	4	0	1	3	0	0	17	78	1	0	1	0	9	0	194
Total	13	400	22	0	8	3	1	0	59	293	14	0	19	4	63	0	899
Grand Total	26	1756	149	1	38	9	14	3	300	1381	40	1	172	38	442	1	4371
Apprch %	1.3	90.9	7.7	0.1	59.4	14.1	21.9	4.7	17.4	80.2	2.3	0.1	26.3	5.8	67.7	0.2	
Total %	0.6	40.2	3.4	0	0.9	0.2	0.3	0.1	6.9	31.6	0.9	0	3.9	0.9	10.1	0	
Motorcycles	0	8	0	0	0	0	0	0	1	6	1	0	0	0	2	0	18
% Motorcycles	0	0.5	0	0	0	0	0	0	0.3	0.4	2.5	0	0	0	0.5	0	0.4
Cars	21	1300	99	0	32	8	10	0	209	931	28	0	120	31	327	0	3116
% Cars	80.8	74	66.4	0	84.2	88.9	71.4	0	69.7	67.4	70	0	69.8	81.6	74	0	71.3
Light Goods Vehicles	5	427	42	0	4	1	4	0	80	404	11	0	51	7	111	0	1147
% Light Goods Vehicles	19.2	24.3	28.2	0	10.5	11.1	28.6	0	26.7	29.3	27.5	0	29.7	18.4	25.1	0	26.2
Buses	0	4	4	0	0	0	0	0	3	9	0	0	0	0	0	0	20
% Buses	0	0.2	2.7	0	0	0	0	0	1	0.7	0	0	0	0	0	0	0.5
Single-Unit Trucks	0	17	4	0	2	0	0	0	5	27	0	0	1	0	1	0	57
% Single-Unit Trucks	0	1	2.7	0	5.3	0	0	0	1.7	2	0	0	0.6	0	0.2	0	1.3
Articulated Trucks	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
% Articulated Trucks	0	0	0	0	0	0	0	0	0.3	0.1	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0	0	0	0	0	1	3	0	0	0	0	1	0	5
% Bicycles on Road	0	0	0	0	0	0	0	0	0.3	0.2	0	0	0	0	0.2	0	0.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0	1	6
% Pedestrians	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0.1

Austin Tsutsumi & Associates

501 Sumner Street #521
Honolulu, HI 96817
Phone: (808) 533-3646 Fax: (808) 526-1267

File Name : Waiale Rd - Kaohu St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 2

	WAIALE RD Southbound					KAOHU ST Westbound					WAIALE RD Northbound					OLULOA DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	120	**11**	0	131	1	0	**1**	0	2	17	**112**	1	0	**130**	6	**4**	38	0	48	311
04:30 PM	2	**126**	9	0	**137**	**3**	0	0	0	3	22	98	3	0	123	**7**	2	**61**	0	**70**	**333**
04:45 PM	**3**	119	10	0	132	2	0	0	0	2	7	83	5	0	95	6	1	30	0	37	266
05:00 PM	3	112	3	0	118	3	0	1	0	**4**	**25**	68	**7**	0	100	6	2	24	0	32	254
Total Volume	8	477	33	0	518	9	0	2	0	11	71	361	16	0	448	25	9	153	0	187	1164
% App. Total	1.5	92.1	6.4	0		81.8	0	18.2	0		15.8	80.6	3.6	0		13.4	4.8	81.8	0		
PHF	.667	.946	.750	.000	.945	.750	.000	.500	.000	.688	.710	.806	.571	.000	.862	.893	.563	.627	.000	.668	.874



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Start Date : 2/1/2018
Page No : 1

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

	WAIALE RD Southbound				KAOHU ST Westbound				WAIALE RD Northbound				OLULOA DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
12:00 AM	0	9	1	0	0	0	0	0	0	3	0	0	0	0	3	0	16
12:15 AM	1	5	0	0	0	0	0	0	3	5	0	0	0	0	0	0	14
12:30 AM	1	4	0	0	0	0	0	0	1	4	1	0	0	0	0	0	11
12:45 AM	0	3	0	0	0	0	0	0	0	1	1	0	0	0	0	0	5
Total	2	21	1	0	0	0	0	0	4	13	2	0	0	0	3	0	46
01:00 AM	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	6
01:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
01:30 AM	0	3	0	0	1	0	0	0	1	1	0	0	0	0	0	0	6
01:45 AM	0	6	0	0	0	0	0	0	1	6	0	0	0	0	0	0	13
Total	0	12	0	0	1	0	0	0	2	11	0	0	0	0	0	0	26
02:00 AM	0	2	1	0	0	0	0	0	1	3	0	0	0	0	0	0	7
02:15 AM	0	6	1	0	0	0	0	0	0	1	0	0	0	0	0	0	8
02:30 AM	0	5	0	0	0	0	0	0	1	3	1	0	0	0	0	0	10
02:45 AM	0	2	1	0	0	0	0	0	1	5	0	0	0	0	0	0	9
Total	0	15	3	0	0	0	0	0	3	12	1	0	0	0	0	0	34
03:00 AM	0	5	0	0	0	0	0	0	1	3	0	0	0	0	0	0	9
03:15 AM	0	1	0	0	0	0	0	0	1	2	0	0	1	0	1	0	6
03:30 AM	0	6	1	0	0	0	0	0	1	2	0	0	1	0	0	0	11
03:45 AM	0	7	1	0	0	0	0	0	1	4	0	0	0	0	2	0	15
Total	0	19	2	0	0	0	0	0	4	11	0	0	2	0	3	0	41
04:00 AM	0	2	0	0	0	0	0	0	1	4	0	0	0	0	1	0	8
04:15 AM	1	8	0	0	2	0	0	0	0	1	0	0	1	0	0	0	13
04:30 AM	0	11	1	0	2	0	0	0	4	11	0	0	2	0	0	0	31
04:45 AM	1	12	2	0	0	0	1	0	3	12	0	0	0	0	1	0	32
Total	2	33	3	0	4	0	1	0	8	28	0	0	3	0	2	0	84
05:00 AM	0	21	1	0	2	0	0	0	2	10	0	0	5	0	3	0	44
05:15 AM	1	21	1	0	2	0	0	0	5	10	1	0	0	0	0	0	41
05:30 AM	0	27	0	0	0	0	0	0	3	16	0	0	1	0	2	0	49
05:45 AM	0	34	2	0	2	0	0	0	5	17	0	0	1	0	1	0	62
Total	1	103	4	0	6	0	0	0	15	53	1	0	7	0	6	0	196
06:00 AM	0	40	4	0	3	0	1	0	4	25	0	0	2	0	2	0	81
06:15 AM	1	56	2	0	4	1	0	0	7	39	1	0	2	0	1	0	114
06:30 AM	0	66	18	0	2	5	1	0	14	37	0	0	3	0	8	0	154
06:45 AM	1	74	29	0	2	2	1	0	22	55	3	0	5	0	7	0	201
Total	2	236	53	0	11	8	3	0	47	156	4	0	12	0	18	0	550
07:00 AM	1	79	26	0	6	2	1	2	35	71	1	0	18	1	28	0	271
07:15 AM	0	107	40	0	8	3	1	0	43	80	0	0	21	2	48	0	353
07:30 AM	3	114	37	0	5	5	3	0	47	84	1	0	21	5	46	0	371
07:45 AM	1	120	15	0	7	1	2	0	21	118	4	0	23	1	22	0	335
Total	5	420	118	0	26	11	7	2	146	353	6	0	83	9	144	0	1330
08:00 AM	0	85	11	0	0	1	2	0	16	83	1	0	15	0	16	0	230
08:15 AM	2	67	10	0	1	4	1	0	16	85	1	0	3	2	17	0	209
08:30 AM	0	79	10	0	2	0	2	0	20	70	2	0	3	1	8	0	197
08:45 AM	1	70	7	0	4	1	0	2	15	98	4	0	1	0	23	0	226
Total	3	301	38	0	7	6	5	2	67	336	8	0	22	3	64	0	862
09:00 AM	0	79	9	0	5	0	1	0	5	70	0	0	7	0	15	1	192
09:15 AM	3	71	10	0	3	0	0	1	12	59	0	0	6	0	7	0	172
09:30 AM	0	78	7	0	1	2	2	0	12	53	4	0	2	1	18	0	180

Austin Tsutsumi & Associates

501 Sumner Street #521
Honolulu, HI 96817
Phone: (808) 533-3646 Fax: (808) 526-1267

File Name : Waiale Rd - Kaohu St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

	WAIALE RD Southbound				KAOHU ST Westbound				WAIALE RD Northbound				OLULOA DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
09:45 AM	5	78	7	0	3	0	1	0	12	77	2	0	12	1	16	0	214
Total	8	306	33	0	12	2	4	1	41	259	6	0	27	2	56	1	758
10:00 AM	1	79	13	0	0	0	0	0	24	67	1	0	12	1	15	0	213
10:15 AM	2	80	11	0	2	0	0	0	11	84	1	0	10	1	6	0	208
10:30 AM	1	90	8	0	3	1	1	1	18	65	1	0	9	1	14	0	213
10:45 AM	1	83	17	0	3	1	0	1	19	81	1	0	13	2	20	0	242
Total	5	332	49	0	8	2	1	2	72	297	4	0	44	5	55	0	876
11:00 AM	4	63	13	0	5	0	0	0	20	65	2	0	15	0	27	0	214
11:15 AM	0	79	16	0	6	0	0	1	18	78	2	0	13	0	20	0	233
11:30 AM	2	73	10	0	3	0	0	0	22	57	0	0	11	0	14	0	192
11:45 AM	1	103	9	0	0	0	2	0	11	62	4	0	13	1	25	0	231
Total	7	318	48	0	14	0	2	1	71	262	8	0	52	1	86	0	870
12:00 PM	0	102	15	0	1	1	0	1	23	65	2	0	16	0	26	0	252
12:15 PM	1	88	8	0	1	0	2	0	23	70	5	0	6	0	18	0	222
12:30 PM	4	87	21	0	3	0	0	0	23	69	3	0	12	0	17	0	239
12:45 PM	5	86	7	0	0	0	1	1	9	96	4	2	5	0	16	0	232
Total	10	363	51	0	5	1	3	2	78	300	14	2	39	0	77	0	945
01:00 PM	1	120	6	0	2	1	0	0	21	70	2	0	5	2	16	0	246
01:15 PM	2	89	10	0	2	1	0	0	27	80	4	0	9	1	12	0	237
01:30 PM	0	100	14	0	3	0	0	0	25	71	1	0	7	0	28	0	249
01:45 PM	0	100	18	0	2	1	0	0	24	77	3	0	11	2	15	0	253
Total	3	409	48	0	9	3	0	0	97	298	10	0	32	5	71	0	985
02:00 PM	0	104	23	0	5	2	0	0	31	82	0	0	16	8	41	0	312
02:15 PM	0	117	15	0	5	1	2	0	25	77	3	0	29	5	61	0	340
02:30 PM	0	100	13	0	1	0	0	0	26	83	3	0	19	1	30	0	276
02:45 PM	0	111	14	0	1	0	0	0	16	93	2	0	5	2	16	0	260
Total	0	432	65	0	12	3	2	0	98	335	8	0	69	16	148	0	1188
03:00 PM	2	115	5	0	5	1	2	2	17	79	1	0	11	2	12	0	254
03:15 PM	0	117	3	0	1	0	3	0	19	75	3	0	8	0	12	0	241
03:30 PM	2	109	5	0	4	0	1	1	20	107	2	0	20	3	37	0	311
03:45 PM	3	116	9	0	0	0	1	0	23	96	3	0	15	3	17	0	286
Total	7	457	22	0	10	1	7	3	79	357	9	0	54	8	78	0	1092
04:00 PM	1	102	10	1	2	2	3	0	18	103	0	1	11	3	24	1	282
04:15 PM	0	120	11	0	1	0	1	0	17	112	1	0	6	4	38	0	311
04:30 PM	2	126	9	0	3	0	0	0	22	98	3	0	7	2	61	0	333
04:45 PM	3	119	10	0	2	0	0	0	7	83	5	0	6	1	30	0	266
Total	6	467	40	1	8	2	4	0	64	396	9	1	30	10	153	1	1192
05:00 PM	3	112	3	0	3	0	1	0	25	68	7	0	6	2	24	0	254
05:15 PM	3	113	5	0	4	0	0	0	11	77	1	0	9	1	21	0	245
05:30 PM	5	97	10	0	0	0	0	0	6	70	5	0	3	1	9	0	206
05:45 PM	2	78	4	0	1	3	0	0	17	78	1	0	1	0	9	0	194
Total	13	400	22	0	8	3	1	0	59	293	14	0	19	4	63	0	899
06:00 PM	1	86	7	0	0	0	0	0	22	63	2	0	8	3	18	0	210
06:15 PM	1	78	5	0	5	1	0	0	15	68	4	0	6	3	14	0	200
06:30 PM	3	75	3	0	1	2	0	0	12	55	4	0	4	0	10	0	169
06:45 PM	1	53	12	0	1	1	0	0	16	66	5	0	5	1	10	0	171
Total	6	292	27	0	7	4	0	0	65	252	15	0	23	7	52	0	750
07:00 PM	4	63	6	0	1	0	0	0	14	43	2	0	0	0	9	1	143
07:15 PM	1	45	2	0	2	0	0	0	10	42	2	0	2	1	6	0	113
07:30 PM	0	35	6	0	0	1	0	0	7	36	5	0	4	0	12	0	106

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Start Date : 2/1/2018

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

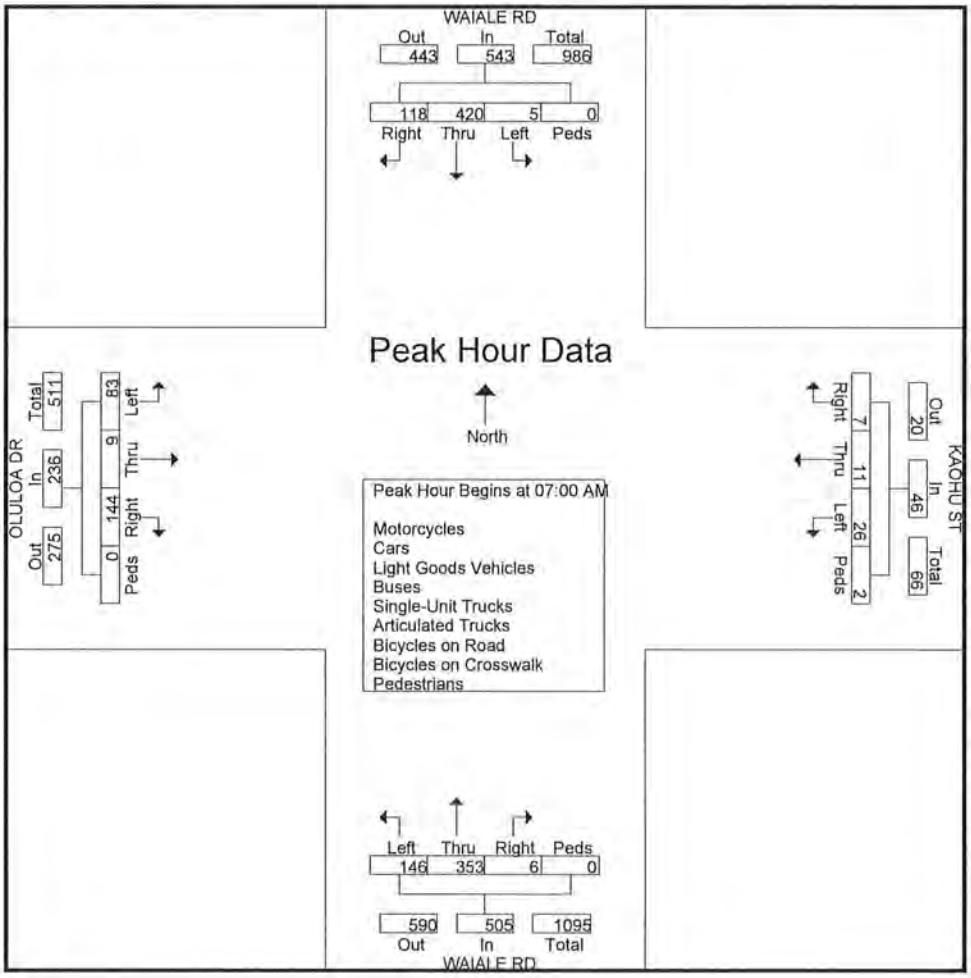
	WAIALE RD Southbound				KAOHU ST Westbound				WAIALE RD Northbound				OLULOA DR Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:45 PM	1	35	5	0	1	0	0	0	3	16	2	0	4	1	10	0	78
Total	6	178	19	0	4	1	0	0	34	137	11	0	10	2	37	1	440
08:00 PM	1	43	3	0	2	2	1	0	1	31	1	0	5	1	11	0	102
08:15 PM	0	46	5	0	2	0	0	0	9	30	2	0	2	0	6	0	102
08:30 PM	1	49	2	0	1	0	0	0	4	41	3	0	1	0	9	0	111
08:45 PM	0	41	1	0	1	0	0	0	6	27	0	0	0	0	5	0	81
Total	2	179	11	0	6	2	1	0	20	129	6	0	8	1	31	0	396
09:00 PM	1	28	1	0	0	0	2	0	8	23	2	0	1	0	3	0	69
09:15 PM	1	33	4	0	1	0	0	0	8	25	1	0	3	2	4	0	82
09:30 PM	0	22	1	0	1	1	0	0	4	20	2	0	2	0	7	0	60
09:45 PM	0	20	1	0	1	1	0	0	2	27	0	0	1	0	3	0	56
Total	2	103	7	0	3	2	2	0	22	95	5	0	7	2	17	0	267
10:00 PM	0	12	2	0	1	0	0	0	2	13	2	0	0	1	1	0	34
10:15 PM	1	25	0	0	0	0	0	0	1	8	1	0	0	0	3	0	39
10:30 PM	0	26	2	0	1	0	0	2	3	9	0	0	0	0	4	0	47
10:45 PM	0	14	1	0	0	0	0	0	1	10	0	0	0	0	1	0	27
Total	1	77	5	0	2	0	0	2	7	40	3	0	0	1	9	0	147
11:00 PM	2	17	1	0	0	0	0	0	1	11	2	0	1	0	0	0	35
11:15 PM	0	12	2	0	0	0	0	0	2	15	2	0	0	0	2	0	35
11:30 PM	0	8	2	0	0	1	0	0	0	10	1	0	0	0	0	0	22
11:45 PM	0	12	0	0	1	0	0	0	1	8	0	0	0	0	0	0	22
Total	2	49	5	0	1	1	0	0	4	44	5	0	1	0	2	0	114
Grand Total	93	5522	674	1	164	52	43	15	1107	4467	149	3	544	76	1175	3	14088
Apprch %	1.5	87.8	10.7	0	59.9	19	15.7	5.5	19.3	78	2.6	0.1	30.3	4.2	65.4	0.2	
Total %	0.7	39.2	4.8	0	1.2	0.4	0.3	0.1	7.9	31.7	1.1	0	3.9	0.5	8.3	0	
Motorcycles	0	27	0	0	0	0	0	0	4	26	2	0	0	0	5	0	64
% Motorcycles	0	0.5	0	0	0	0	0	0	0.4	0.6	1.3	0	0	0	0.4	0	0.5
Cars	72	4088	494	0	133	42	32	0	792	3161	114	0	380	54	852	0	10214
% Cars	77.4	74	73.3	0	81.1	80.8	74.4	0	71.5	70.8	76.5	0	69.9	71.1	72.5	0	72.5
Light Goods Vehicles	21	1282	158	0	28	8	11	0	271	1154	32	0	147	21	299	0	3432
% Light Goods Vehicles	22.6	23.2	23.4	0	17.1	15.4	25.6	0	24.5	25.8	21.5	0	27	27.6	25.4	0	24.4
Buses	0	10	12	0	0	0	0	0	13	21	0	0	0	0	1	0	57
% Buses	0	0.2	1.8	0	0	0	0	0	1.2	0.5	0	0	0	0	0.1	0	0.4
Single-Unit Trucks	0	108	9	0	3	2	0	0	23	98	0	0	17	1	13	0	274
% Single-Unit Trucks	0	2	1.3	0	1.8	3.8	0	0	2.1	2.2	0	0	3.1	1.3	1.1	0	1.9
Articulated Trucks	0	5	0	0	0	0	0	0	2	4	0	0	0	0	4	0	15
% Articulated Trucks	0	0.1	0	0	0	0	0	0	0.2	0.1	0	0	0	0	0.3	0	0.1
Bicycles on Road	0	2	1	0	0	0	0	0	2	3	1	0	0	0	1	0	10
% Bicycles on Road	0	0	0.1	0	0	0	0	0	0.2	0.1	0.7	0	0	0	0.1	0	0.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	1	0	0	0	15	0	0	0	3	0	0	0	3	22
% Pedestrians	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0.2

Austin Tsutsumi & Associates

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File Name : Waiale Rd - Kaohu St
Site Code : 17-524 Wailuku Affordable Housing
Start Date : 2/1/2018
Page No : 4

	WAIALE RD Southbound					KAOHU ST Westbound					WAIALE RD Northbound					OLULOA DR Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 AM to 11:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	79	26	0	106	6	2	1	**2**	11	35	71	1	0	107	18	1	28	0	47	271
07:15 AM	0	107	**40**	0	147	**8**	3	1	0	12	43	80	0	0	123	21	2	**48**	0	71	353
07:30 AM	**3**	114	37	0	**154**	5	**5**	**3**	0	**13**	**47**	84	1	0	132	21	**5**	46	0	**72**	**371**
07:45 AM	1	**120**	15	0	136	7	1	2	0	10	21	**118**	**4**	0	**143**	**23**	1	22	0	46	335
Total Volume	5	420	118	0	543	26	11	7	2	46	146	353	6	0	505	83	9	144	0	236	1330
% App. Total	0.9	77.3	21.7	0		56.5	23.9	15.2	4.3		28.9	69.9	1.2	0		35.2	3.8	61	0		
PHF	.417	.875	.738	.000	.881	.813	.550	.583	.250	.885	.777	.748	.375	.000	.883	.902	.450	.750	.000	.819	.896



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File Name : AM_Honoapiilani Hwy - Waiko Rd
Site Code : 00000000
Start Date : 3/15/2017
Page No : 1

Groups Printed- Unshifted - Bank 1

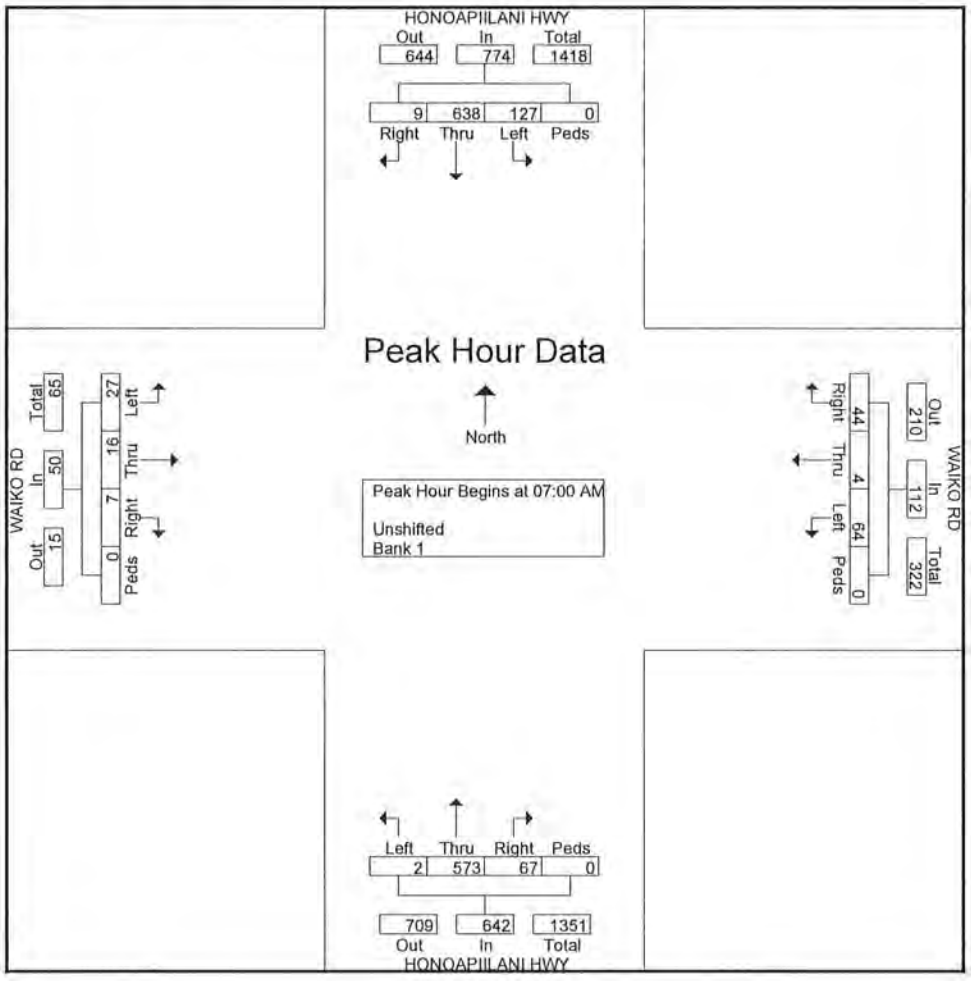
	HONOAPIILANI HWY Southbound				WAIKO RD Westbound				HONOAPIILANI HWY Northbound				WAIKO RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	7	135	0	0	12	1	3	0	0	87	9	0	5	3	1	0	263
06:45 AM	12	161	3	1	19	1	5	0	1	97	6	0	6	4	1	0	317
Total	19	296	3	1	31	2	8	0	1	184	15	0	11	7	2	0	580
07:00 AM	18	162	1	0	19	0	5	0	0	130	11	0	6	7	0	0	359
07:15 AM	32	162	2	0	16	1	17	0	2	162	15	0	10	4	1	0	424
07:30 AM	49	153	2	0	17	2	13	0	0	162	21	0	6	4	4	0	433
07:45 AM	28	161	4	0	12	1	9	0	0	119	20	0	5	1	2	0	362
Total	127	638	9	0	64	4	44	0	2	573	67	0	27	16	7	0	1578
08:00 AM	20	95	2	0	19	2	8	1	1	78	11	0	4	1	0	0	242
08:15 AM	6	97	0	0	6	0	3	0	0	91	8	0	5	4	1	0	221
Grand Total	172	1126	14	1	120	8	63	1	4	926	101	0	47	28	10	0	2621
Apprch %	13.1	85.8	1.1	0.1	62.5	4.2	32.8	0.5	0.4	89.8	9.8	0	55.3	32.9	11.8	0	
Total %	6.6	43	0.5	0	4.6	0.3	2.4	0	0.2	35.3	3.9	0	1.8	1.1	0.4	0	
Unshifted	172	1126	14	1	120	8	63	1	4	926	101	0	47	28	10	0	2621
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : AM_Honoapiilani Hwy - Waiko Rd
Site Code : 00000000
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	HONOAPIILANI HWY Southbound					WAIKO RD Westbound					HONOAPIILANI HWY Northbound					WAIKO RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	18	**162**	1	0	181	**19**	0	5	0	24	0	130	11	0	141	6	**7**	0	0	13	359
07:15 AM	32	162	2	0	196	16	1	**17**	0	**34**	**2**	**162**	15	0	179	**10**	4	1	0	**15**	424
07:30 AM	**49**	153	2	0	**204**	17	**2**	13	0	32	0	162	**21**	0	**183**	6	4	**4**	0	14	**433**
07:45 AM	28	161	**4**	0	193	12	1	9	0	22	0	119	20	0	139	5	1	2	0	8	362
Total Volume	127	638	9	0	774	64	4	44	0	112	2	573	67	0	642	27	16	7	0	50	1578
% App. Total	16.4	82.4	1.2	0		57.1	3.6	39.3	0		0.3	89.3	10.4	0		54	32	14	0		
PHF	.648	.985	.563	.000	.949	.842	.500	.647	.000	.824	.250	.884	.798	.000	.877	.675	.571	.438	.000	.833	.911



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Site Code : 00000000
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Groups Printed- Unshifted - Bank 1

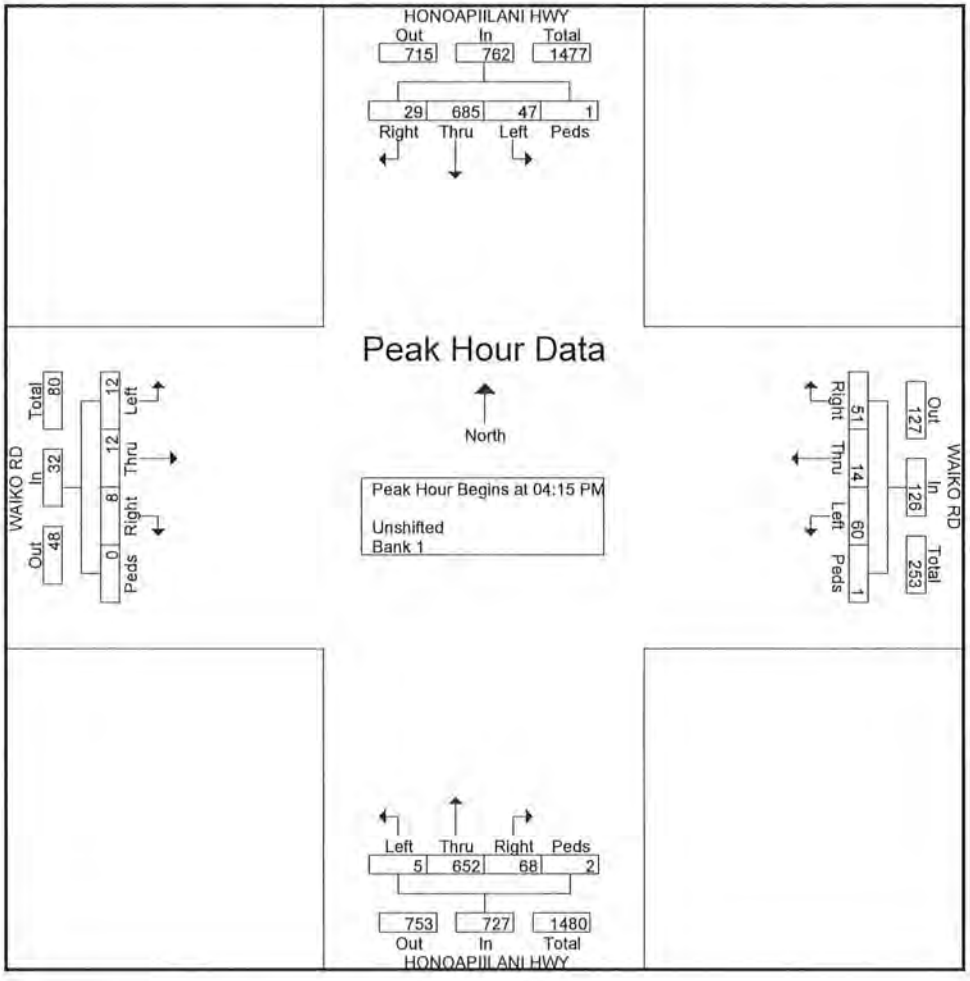
	HONOAPIILANI HWY Southbound				WAIKO RD Westbound				HONOAPIILANI HWY Northbound				WAIKO RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	7	143	7	0	10	3	21	0	2	132	12	0	3	1	1	0	342
03:45 PM	14	128	9	0	15	4	9	0	2	164	16	0	6	0	1	0	368
Total	21	271	16	0	25	7	30	0	4	296	28	0	9	1	2	0	710
04:00 PM	9	120	6	0	19	6	10	0	4	158	14	0	2	0	1	0	349
04:15 PM	12	135	8	0	13	3	11	1	2	194	15	0	1	4	3	0	402
04:30 PM	9	196	9	1	7	4	14	0	0	162	17	0	3	3	4	0	429
04:45 PM	13	172	6	0	23	3	14	0	1	131	17	0	4	1	0	0	385
Total	43	623	29	1	62	16	49	1	7	645	63	0	10	8	8	0	1565
05:00 PM	13	182	6	0	17	4	12	0	2	165	19	2	4	4	1	0	431
05:15 PM	9	107	4	1	10	4	20	0	1	123	9	0	12	1	0	0	301
Grand Total	86	1183	55	2	114	31	111	1	14	1229	119	2	35	14	11	0	3007
Apprch %	6.5	89.2	4.1	0.2	44.4	12.1	43.2	0.4	1	90.1	8.7	0.1	58.3	23.3	18.3	0	
Total %	2.9	39.3	1.8	0.1	3.8	1	3.7	0	0.5	40.9	4	0.1	1.2	0.5	0.4	0	
Unshifted	86	1183	55	2	114	31	111	1	14	1229	119	2	35	14	11	0	3007
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Site Code : 00000000
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	HONOAPIILANI HWY Southbound					WAIKO RD Westbound					HONOAPIILANI HWY Northbound					WAIKO RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	12	135	8	0	155	13	3	11	**1**	28	**2**	**194**	15	0	**211**	1	**4**	3	0	8	402
04:30 PM	9	**196**	**9**	**1**	**215**	7	**4**	**14**	0	25	0	162	17	0	179	3	3	**4**	0	**10**	429
04:45 PM	**13**	172	6	0	191	**23**	3	14	0	**40**	1	131	17	0	149	**4**	1	0	0	5	385
05:00 PM	13	182	6	0	201	17	4	12	0	33	2	165	**19**	**2**	188	4	4	1	0	9	**431**
Total Volume	47	685	29	1	762	60	14	51	1	126	5	652	68	2	727	12	12	8	0	32	1647
% App. Total	6.2	89.9	3.8	0.1		47.6	11.1	40.5	0.8		0.7	89.7	9.4	0.3		37.5	37.5	25	0		
PHF	.904	.874	.806	.250	.886	.652	.875	.911	.250	.788	.625	.840	.895	.250	.861	.750	.750	.500	.000	.800	.955



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File Name : AM_Waiale Rd - Waiko Rd
Site Code : 00000000
Start Date : 3/15/2017
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Groups Printed- Unshifted - Bank 1

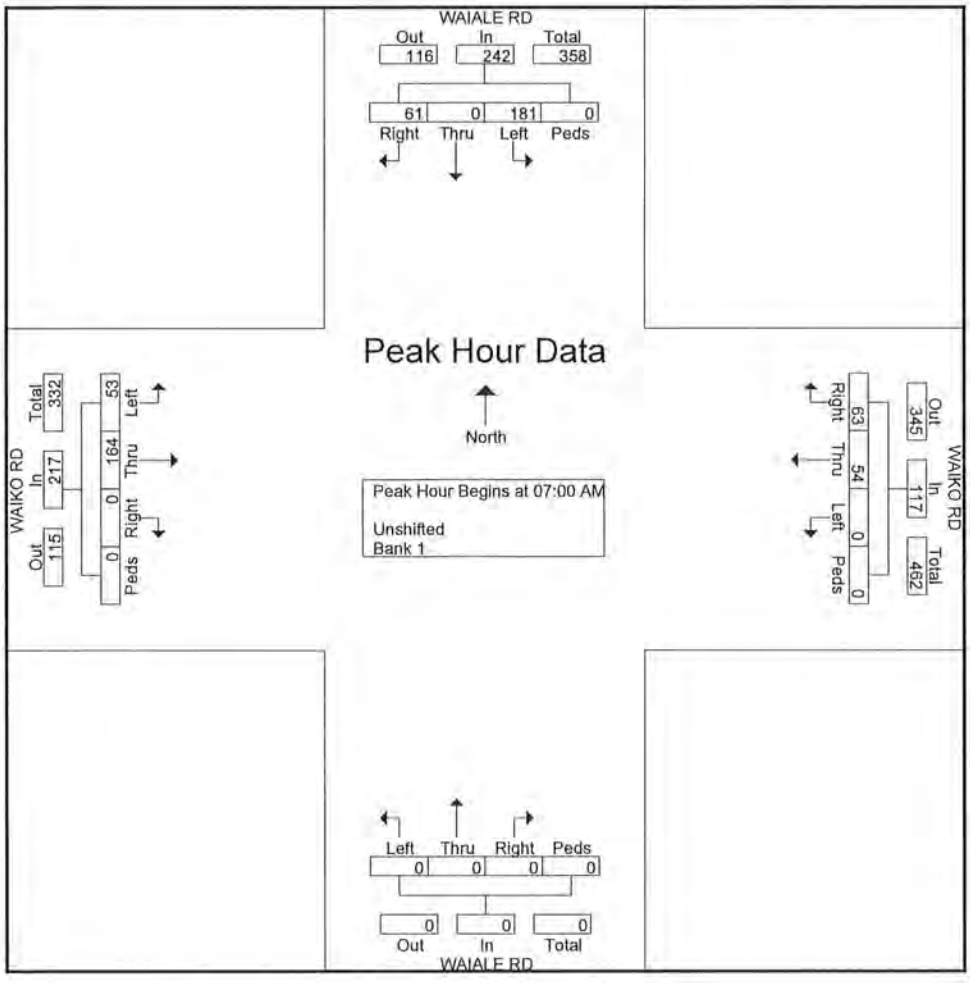
	WAIALE RD Southbound				WAIKO RD Westbound				WAIALE RD Northbound				WAIKO RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	29	0	15	0	0	4	7	0	0	0	0	0	4	16	0	0	75
06:45 AM	47	0	15	0	0	6	7	0	0	0	0	0	5	18	0	0	98
Total	76	0	30	0	0	10	14	0	0	0	0	0	9	34	0	0	173
07:00 AM	37	0	19	0	0	6	17	0	0	0	0	0	6	23	0	0	108
07:15 AM	58	0	13	0	0	17	15	0	0	0	0	0	15	43	0	0	161
07:30 AM	43	0	14	0	0	14	17	0	0	0	0	0	16	57	0	0	161
07:45 AM	43	0	15	0	0	17	14	0	0	0	0	0	16	41	0	0	146
Total	181	0	61	0	0	54	63	0	0	0	0	0	53	164	0	0	576
08:00 AM	22	0	15	0	0	14	23	0	0	0	0	0	11	21	0	0	106
08:15 AM	22	0	4	0	0	9	17	0	0	0	0	0	7	14	0	0	73
Grand Total	301	0	110	0	0	87	117	0	0	0	0	0	80	233	0	0	928
Apprch %	73.2	0	26.8	0	0	42.6	57.4	0	0	0	0	0	25.6	74.4	0	0	
Total %	32.4	0	11.9	0	0	9.4	12.6	0	0	0	0	0	8.6	25.1	0	0	
Unshifted	301	0	110	0	0	87	117	0	0	0	0	0	80	233	0	0	928
% Unshifted	100	0	100	0	0	100	100	0	0	0	0	0	100	100	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	WAIALE RD Southbound					WAIKO RD Westbound					WAIALE RD Northbound					WAIKO RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	37	0	**18**	0	56	0	6	**17**	0	23	0	0	0	0	0	6	23	0	0	29	108
07:15 AM	**58**	0	13	0	**71**	0	**17**	15	0	**32**	0	0	0	0	0	15	43	0	0	58	**181**
07:30 AM	43	0	14	0	57	0	14	17	0	31	0	0	0	0	0	**18**	**57**	0	0	**73**	161
07:45 AM	43	0	15	0	58	0	17	14	0	31	0	0	0	0	0	16	41	0	0	57	146
Total Volume	181	0	61	0	242	0	54	63	0	117	0	0	0	0	0	53	164	0	0	217	576
% App. Total	74.8	0	25.2	0		0	46.2	53.8	0		0	0	0	0		24.4	75.6	0	0		
PHF	.760	.000	.803	.000	.852	.000	.794	.926	.000	.914	.000	.000	.000	.000	.000	.828	.719	.000	.000	.743	.894



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Groups Printed- Unshifted - Bank 1

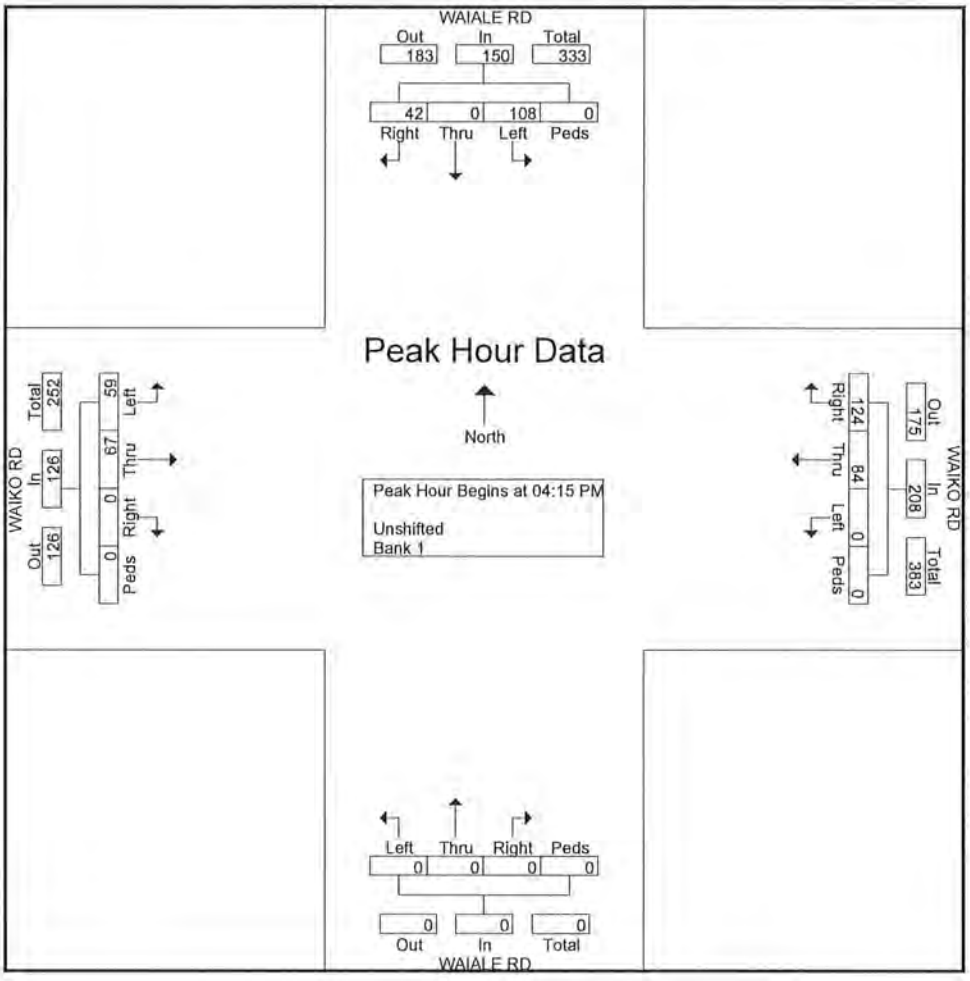
	WAIALE RD Southbound				WAIKO RD Westbound				WAIALE RD Northbound				WAIKO RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	25	0	9	0	0	23	31	0	0	0	0	0	9	13	0	0	110
03:45 PM	18	0	8	0	0	17	34	0	0	0	0	0	13	17	0	0	107
Total	43	0	17	0	0	40	65	0	0	0	0	0	22	30	0	0	217
04:00 PM	22	0	8	0	0	28	30	0	0	0	0	0	8	15	0	0	111
04:15 PM	26	0	13	0	0	21	34	0	0	0	0	0	21	16	0	0	131
04:30 PM	36	0	5	0	0	15	35	0	0	0	0	0	12	14	0	0	117
04:45 PM	25	0	13	0	0	29	30	0	0	0	0	0	11	18	0	0	126
Total	109	0	39	0	0	93	129	0	0	0	0	0	52	63	0	0	485
05:00 PM	21	0	11	0	0	19	25	0	0	0	0	0	15	19	0	0	110
05:15 PM	22	0	12	0	0	30	43	0	0	0	0	0	7	20	0	0	134
Grand Total	195	0	79	0	0	182	262	0	0	0	0	0	96	132	0	0	946
Apprch %	71.2	0	28.8	0	0	41	59	0	0	0	0	0	42.1	57.9	0	0	
Total %	20.6	0	8.4	0	0	19.2	27.7	0	0	0	0	0	10.1	14	0	0	
Unshifted	195	0	79	0	0	182	262	0	0	0	0	0	96	132	0	0	946
% Unshifted	100	0	100	0	0	100	100	0	0	0	0	0	100	100	0	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	WAIALE RD Southbound					WAIKO RD Westbound					WAIALE RD Northbound					WAIKO RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	26	0	**13**	0	39	0	21	34	0	55	0	0	0	0	0	**21**	16	0	0	**37**	**131**
04:30 PM	**38**	0	5	0	**41**	0	15	**35**	0	50	0	0	0	0	0	12	14	0	0	26	117
04:45 PM	25	0	13	0	38	0	**29**	30	0	**59**	0	0	0	0	0	11	18	0	0	29	126
05:00 PM	21	0	11	0	32	0	19	25	0	44	0	0	0	0	0	15	**19**	0	0	34	110
Total Volume	108	0	42	0	150	0	84	124	0	208	0	0	0	0	0	59	67	0	0	126	484
% App. Total	72	0	28	0		0	40.4	59.6	0		0	0	0	0		46.8	53.2	0	0		
PHF	.750	.000	.808	.000	.915	.000	.724	.886	.000	.881	.000	.000	.000	.000	.000	.702	.882	.000	.000	.851	.924



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Phone: (808) 533-3646 Fax: (808) 526-1267

File Name : AM_Waiale Rd - Waikapu Gardens Dwy
Site Code : 00000000
Start Date : 3/15/2017
Page No : 1

Groups Printed- Unshifted - Bank 1

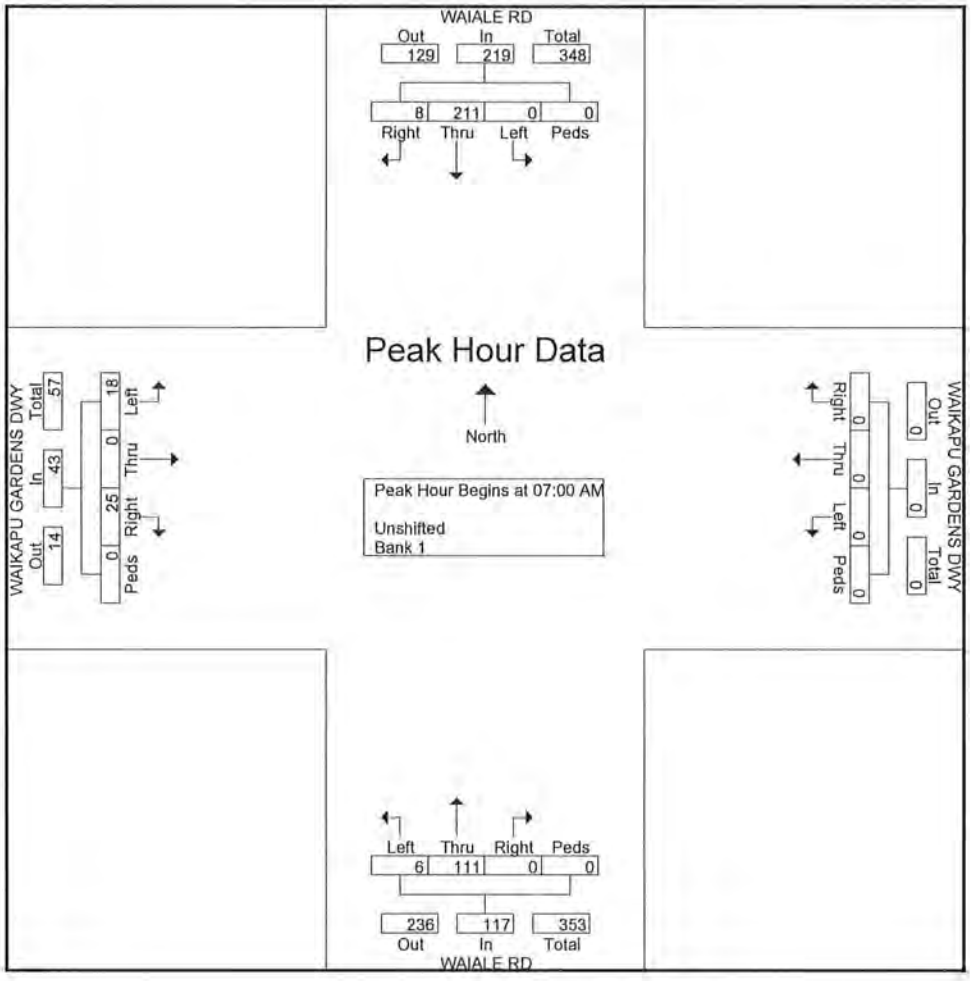
	WAIALE RD Southbound				WAIKAPU GARDENS DWY Westbound				WAIALE RD Northbound				WAIKAPU GARDENS DWY Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	0	36	1	0	0	0	0	0	1	11	0	0	5	0	4	0	58
06:45 AM	0	61	3	0	0	0	0	0	0	12	0	0	9	0	0	0	85
Total	0	97	4	0	0	0	0	0	1	23	0	0	14	0	4	0	143
07:00 AM	0	46	2	0	0	0	0	0	0	24	0	0	4	0	10	0	86
07:15 AM	0	66	2	0	0	0	0	0	0	29	0	0	8	0	5	0	110
07:30 AM	0	50	2	0	0	0	0	0	2	31	0	0	3	0	3	0	91
07:45 AM	0	49	2	0	0	0	0	0	4	27	0	0	3	0	7	0	92
Total	0	211	8	0	0	0	0	0	6	111	0	0	18	0	25	0	379
08:00 AM	0	32	3	0	0	0	0	0	3	32	0	0	0	0	4	0	74
08:15 AM	0	26	2	0	0	0	0	0	1	27	0	0	2	0	3	0	61
Grand Total	0	366	17	0	0	0	0	0	11	193	0	0	34	0	36	0	657
Apprch %	0	95.6	4.4	0	0	0	0	0	5.4	94.6	0	0	48.6	0	51.4	0	
Total %	0	55.7	2.6	0	0	0	0	0	1.7	29.4	0	0	5.2	0	5.5	0	
Unshifted	0	366	17	0	0	0	0	0	11	193	0	0	34	0	36	0	657
% Unshifted	0	100	100	0	0	0	0	0	100	100	0	0	100	0	100	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	WAIALE RD Southbound					WAIKAPU GARDENS DWY Westbound					WAIALE RD Northbound					WAIKAPU GARDENS DWY Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	46	**2**	0	48	0	0	0	0	0	0	24	0	0	24	4	0	**10**	0	**14**	86
07:15 AM	0	**66**	2	0	**68**	0	0	0	0	0	0	29	0	0	29	**8**	0	5	0	13	**110**
07:30 AM	0	50	2	0	52	0	0	0	0	0	2	**31**	0	0	**33**	3	0	3	0	6	91
07:45 AM	0	49	2	0	51	0	0	0	0	0	**4**	27	0	0	31	3	0	7	0	10	92
Total Volume	0	211	8	0	219	0	0	0	0	0	6	111	0	0	117	18	0	25	0	43	379
% App. Total	0	96.3	3.7	0		0	0	0	0		5.1	94.9	0	0		41.9	0	58.1	0		
PHF	.000	.799	1.00	.000	.805	.000	.000	.000	.000	.000	.375	.895	.000	.000	.886	.563	.000	.625	.000	.768	.861



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Start Date : 3/15/2017
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Groups Printed- Unshifted - Bank 1

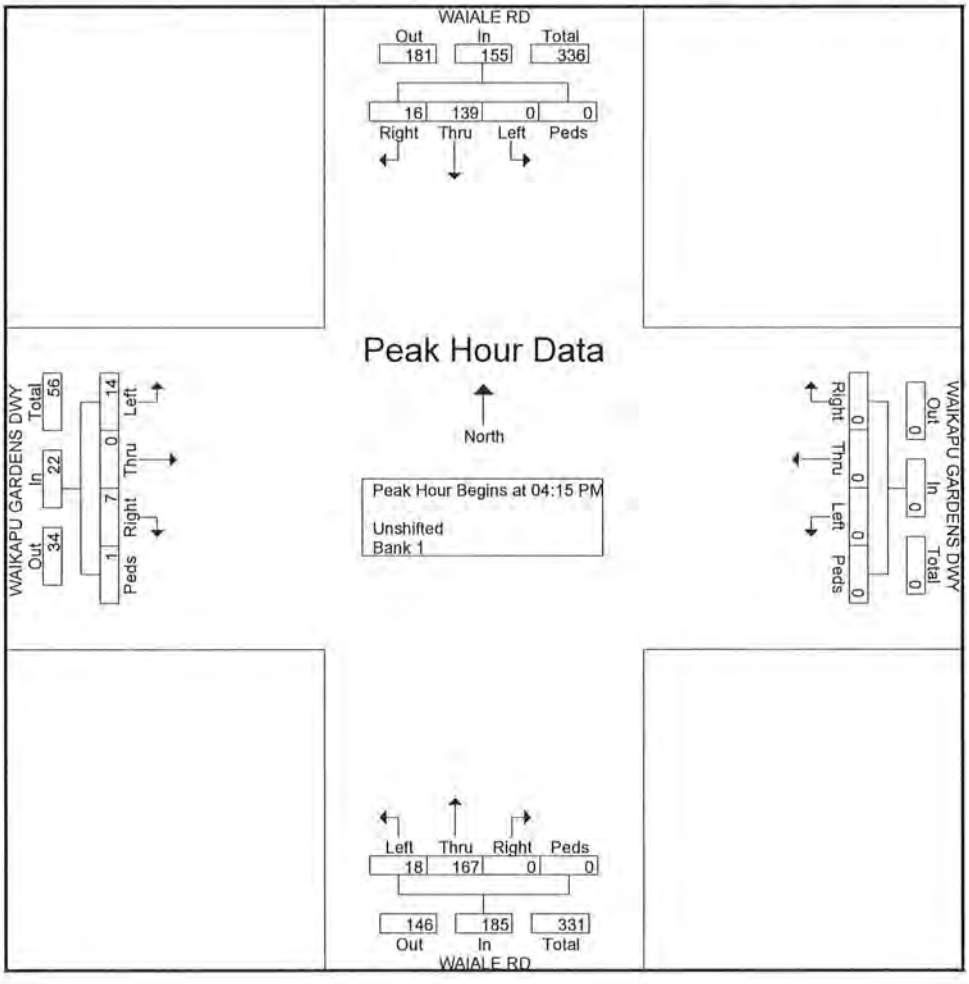
	WAIALE RD Southbound				WAIKAPU GARDENS DWY Westbound				WAIALE RD Northbound				WAIKAPU GARDENS DWY Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	0	28	3	0	0	0	0	0	2	39	0	0	1	0	0	0	73
03:45 PM	0	30	5	0	0	0	0	0	1	47	0	0	2	0	1	0	86
Total	0	58	8	0	0	0	0	0	3	86	0	0	3	0	1	0	159
04:00 PM	0	33	4	0	0	0	0	0	2	40	0	0	2	0	1	0	82
04:15 PM	0	37	4	0	0	0	0	0	3	48	0	0	4	0	2	0	98
04:30 PM	0	38	5	0	0	0	0	0	7	48	0	0	3	0	2	1	104
04:45 PM	0	30	4	0	0	0	0	0	4	33	0	0	3	0	2	0	76
Total	0	138	17	0	0	0	0	0	16	169	0	0	12	0	7	1	360
05:00 PM	0	34	3	0	0	0	0	0	4	38	0	0	4	0	1	0	84
05:15 PM	0	33	2	0	0	0	0	0	6	46	0	0	1	0	2	0	90
Grand Total	0	263	30	0	0	0	0	0	29	339	0	0	20	0	11	1	693
Apprch %	0	89.8	10.2	0	0	0	0	0	7.9	92.1	0	0	62.5	0	34.4	3.1	
Total %	0	38	4.3	0	0	0	0	0	4.2	48.9	0	0	2.9	0	1.6	0.1	
Unshifted	0	263	30	0	0	0	0	0	29	339	0	0	20	0	11	1	693
% Unshifted	0	100	100	0	0	0	0	0	100	100	0	0	100	0	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Site Code : 00000000
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	WAIALE RD Southbound					WAIKAPU GARDENS DWY Westbound					WAIALE RD Northbound					WAIKAPU GARDENS DWY Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	37	4	0	41	0	0	0	0	0	3	**48**	0	0	51	**4**	0	**2**	0	**6**	98
04:30 PM	0	**38**	**5**	0	**43**	0	0	0	0	0	**7**	48	0	0	**55**	3	0	2	**1**	6	**104**
04:45 PM	0	30	4	0	34	0	0	0	0	0	4	33	0	0	37	3	0	2	0	5	76
05:00 PM	0	34	3	0	37	0	0	0	0	0	4	38	0	0	42	4	0	1	0	5	84
Total Volume	0	139	16	0	155	0	0	0	0	0	18	167	0	0	185	14	0	7	1	22	362
% App. Total	0	89.7	10.3	0		0	0	0	0		9.7	90.3	0	0		63.6	0	31.8	4.5		
PHF	.000	.914	.800	.000	.901	.000	.000	.000	.000	.000	.643	.870	.000	.000	.841	.875	.000	.875	.250	.917	.870



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File Name : AM_Waiale Rd - Nokekula Lp
Site Code : 00000000
Start Date : 10/22/2015
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Groups Printed- Unshifted

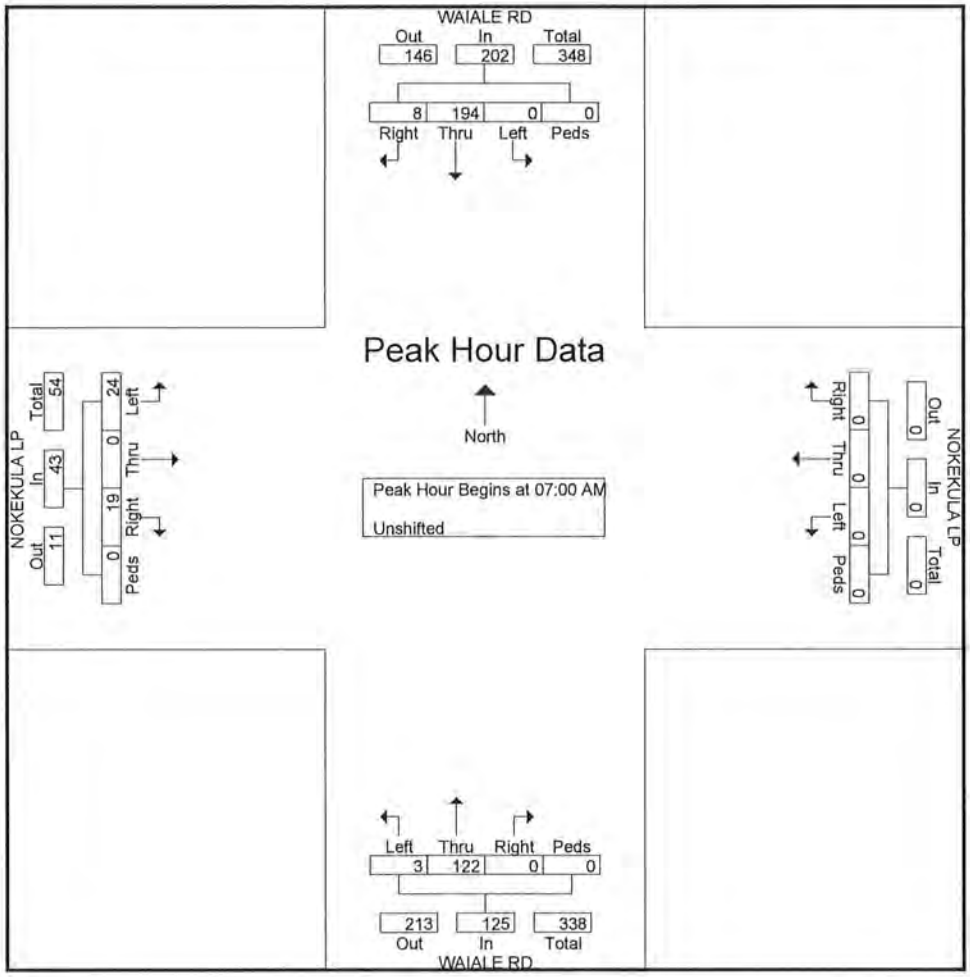
	NOKEKULA LP Eastbound				NOKEKULA LP Westbound				WAIALE RD Northbound				WAIALE RD Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	2	0	8	0	0	0	0	0	1	10	0	0	0	58	1	0	80
Total	2	0	8	0	0	0	0	0	1	10	0	0	0	58	1	0	80
07:00 AM	11	0	8	0	0	0	0	0	1	29	0	0	0	46	1	0	96
07:15 AM	6	0	2	0	0	0	0	0	1	25	0	0	0	48	0	0	82
07:30 AM	5	0	2	0	0	0	0	0	0	47	0	0	0	52	2	0	108
07:45 AM	2	0	7	0	0	0	0	0	1	21	0	0	0	48	5	0	84
Total	24	0	19	0	0	0	0	0	3	122	0	0	0	194	8	0	370
08:00 AM	3	0	1	0	0	0	0	0	1	19	0	0	0	25	3	0	52
08:15 AM	2	0	3	0	0	0	0	0	2	32	0	0	0	20	3	0	62
Grand Total	31	0	31	0	0	0	0	0	7	183	0	0	0	297	15	0	564
Apprch %	50	0	50	0	0	0	0	0	3.7	96.3	0	0	0	95.2	4.8	0	
Total %	5.5	0	5.5	0	0	0	0	0	1.2	32.4	0	0	0	52.7	2.7	0	

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	NOKEKULA LP Eastbound					NOKEKULA LP Westbound					WAIALE RD Northbound					WAIALE RD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	11	0	8	0	19	0	0	0	0	0	1	29	0	0	30	0	46	1	0	47	96
07:15 AM	6	0	2	0	8	0	0	0	0	0	1	25	0	0	26	0	48	0	0	48	82
07:30 AM	5	0	2	0	7	0	0	0	0	0	0	47	0	0	47	0	52	2	0	54	108
07:45 AM	2	0	7	0	9	0	0	0	0	0	1	21	0	0	22	0	48	5	0	53	84
Total Volume	24	0	19	0	43	0	0	0	0	0	3	122	0	0	125	0	194	8	0	202	370
% App. Total	55.8	0	44.2	0		0	0	0	0		2.4	97.6	0	0		0	96	4	0		
PHF	.545	.000	.594	.000	.566	.000	.000	.000	.000	.000	.750	.649	.000	.000	.665	.000	.933	.400	.000	.935	.856



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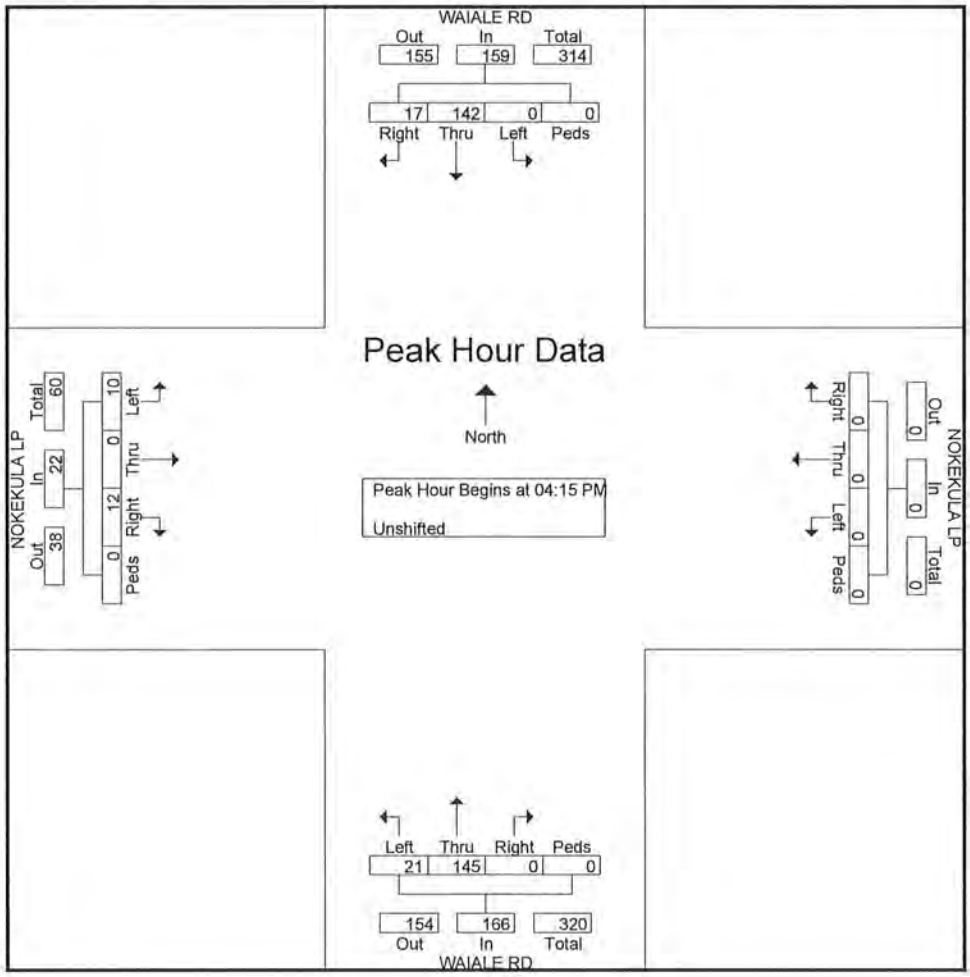
	NOKEKULA LP Eastbound				NOKEKULA LP Westbound				WAIALE RD Northbound				WAIALE RD Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	3	0	0	0	0	0	0	0	2	27	0	0	0	23	1	0	56
03:45 PM	0	0	1	0	0	0	0	0	4	49	0	0	0	27	2	0	83
Total	3	0	1	0	0	0	0	0	6	76	0	0	0	50	3	0	139
04:00 PM	0	0	4	0	0	0	0	0	2	34	0	0	0	29	5	0	74
04:15 PM	2	0	0	0	0	0	0	0	8	26	0	0	0	30	4	0	70
04:30 PM	2	0	4	0	0	0	0	0	7	34	0	0	0	37	4	0	88
04:45 PM	2	0	3	0	0	0	0	0	3	47	0	0	0	42	4	0	101
Total	6	0	11	0	0	0	0	0	20	141	0	0	0	138	17	0	333
05:00 PM	4	0	5	0	0	0	0	0	3	38	0	0	0	33	5	0	88
05:15 PM	3	0	2	0	0	0	0	0	2	38	0	0	0	34	2	0	81
Grand Total	16	0	19	0	0	0	0	0	31	293	0	0	0	255	27	0	641
Apprch %	45.7	0	54.3	0	0	0	0	0	9.6	90.4	0	0	0	90.4	9.6	0	
Total %	2.5	0	3	0	0	0	0	0	4.8	45.7	0	0	0	39.8	4.2	0	

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	NOKEKULA LP Eastbound					NOKEKULA LP Westbound					WAIALE RD Northbound					WAIALE RD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	2	0	0	0	2	0	0	0	0	0	8	26	0	0	34	0	30	4	0	34	70
04:30 PM	2	0	4	0	6	0	0	0	0	0	7	34	0	0	41	0	37	4	0	41	88
04:45 PM	2	0	3	0	5	0	0	0	0	0	3	47	0	0	50	0	42	4	0	46	101
05:00 PM	4	0	5	0	9	0	0	0	0	0	3	38	0	0	41	0	33	5	0	38	88
Total Volume	10	0	12	0	22	0	0	0	0	0	21	145	0	0	166	0	142	17	0	159	347
% App. Total	45.5	0	54.5	0		0	0	0	0		12.7	87.3	0	0		0	89.3	10.7	0		
PHF	.625	.000	.600	.000	.611	.000	.000	.000	.000	.000	.656	.771	.000	.000	.830	.000	.845	.850	.000	.864	.859



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Start Date : 10/22/2015
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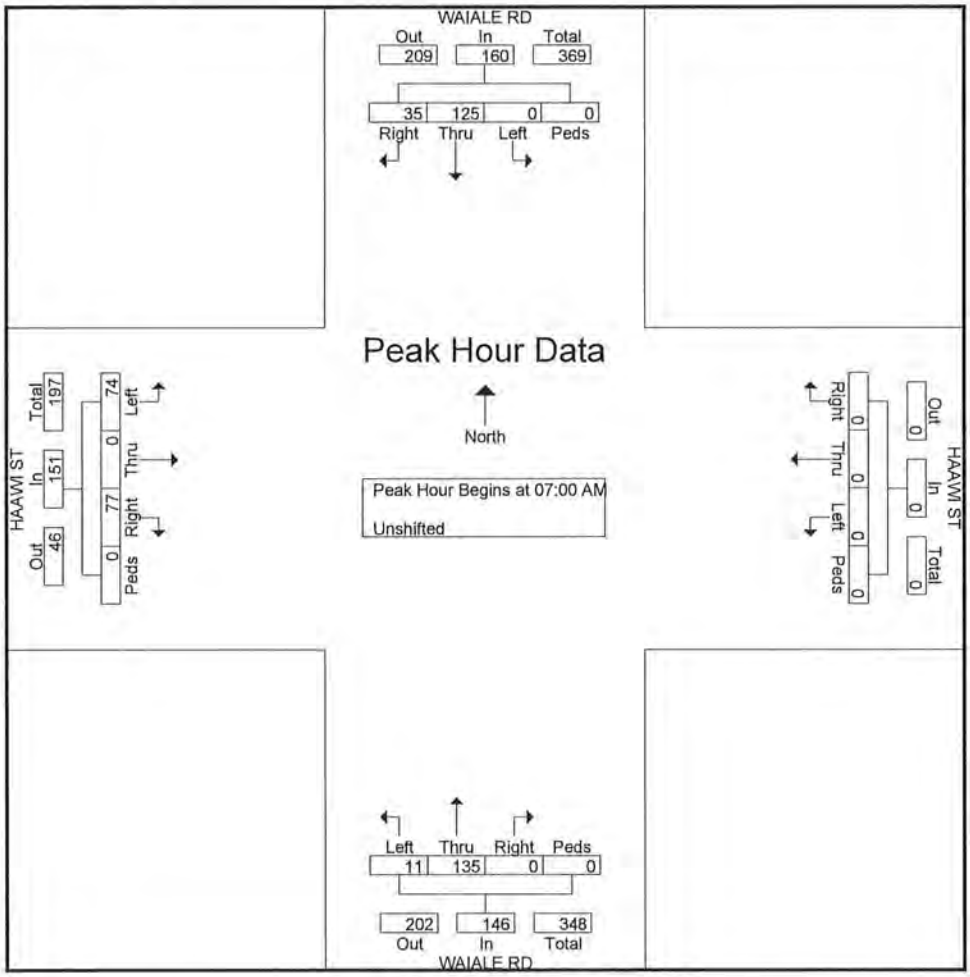
	HAAWI ST Eastbound				HAAWI ST Westbound				WAIALE RD Northbound				WAIALE RD Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	21	0	19	0	0	0	0	0	3	9	0	0	0	40	3	0	95
Total	21	0	19	0	0	0	0	0	3	9	0	0	0	40	3	0	95
07:00 AM	22	0	21	0	0	0	0	0	2	38	0	0	0	26	6	0	115
07:15 AM	30	0	20	0	0	0	0	0	2	29	0	0	0	28	10	0	119
07:30 AM	15	0	21	0	0	0	0	0	4	48	0	0	0	33	8	0	129
07:45 AM	7	0	15	0	0	0	0	0	3	20	0	0	0	38	11	0	94
Total	74	0	77	0	0	0	0	0	11	135	0	0	0	125	35	0	457
08:00 AM	5	0	3	0	0	0	0	0	1	21	0	0	0	25	11	0	66
08:15 AM	8	0	9	0	0	0	0	0	7	27	0	0	0	14	6	0	71
Grand Total	108	0	108	0	0	0	0	0	22	192	0	0	0	204	55	0	689
Apprch %	50	0	50	0	0	0	0	0	10.3	89.7	0	0	0	78.8	21.2	0	
Total %	15.7	0	15.7	0	0	0	0	0	3.2	27.9	0	0	0	29.6	8	0	

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	HAAWI ST Eastbound					HAAWI ST Westbound					WAIALE RD Northbound					WAIALE RD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	22	0	21	0	43	0	0	0	0	0	2	38	0	0	40	0	26	6	0	32	115
07:15 AM	30	0	20	0	50	0	0	0	0	0	2	29	0	0	31	0	28	10	0	38	119
07:30 AM	15	0	21	0	36	0	0	0	0	0	4	48	0	0	52	0	33	8	0	41	129
07:45 AM	7	0	15	0	22	0	0	0	0	0	3	20	0	0	23	0	38	11	0	49	94
Total Volume	74	0	77	0	151	0	0	0	0	0	11	135	0	0	146	0	125	35	0	160	457
% App. Total	49	0	51	0		0	0	0	0		7.5	92.5	0	0		0	78.1	21.9	0		
PHF	.617	.000	.917	.000	.755	.000	.000	.000	.000	.000	.688	.703	.000	.000	.702	.000	.822	.795	.000	.816	.886



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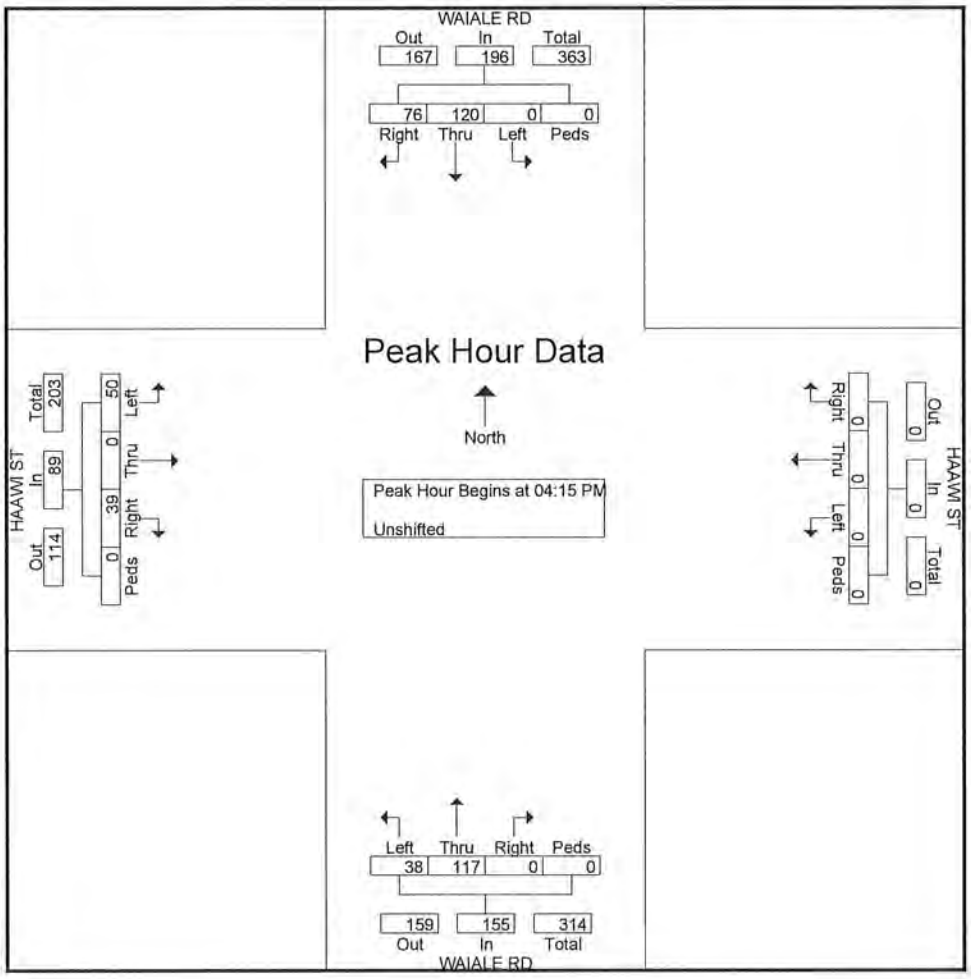
	HAAWI ST Eastbound				HAAWI ST Westbound				WAIALE RD Northbound				WAIALE RD Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	12	0	10	0	0	0	0	0	7	23	0	0	0	14	16	0	82
03:45 PM	10	0	3	0	0	0	0	0	9	40	0	0	0	26	10	0	98
Total	22	0	13	0	0	0	0	0	16	63	0	0	0	40	26	0	180
04:00 PM	14	0	3	0	0	0	0	0	15	19	0	0	0	31	13	0	95
04:15 PM	12	0	5	0	0	0	0	0	1	27	0	0	0	29	16	0	90
04:30 PM	14	0	12	0	0	0	0	0	16	20	0	0	0	29	18	0	109
04:45 PM	14	0	15	0	0	0	0	0	11	38	0	0	0	31	20	0	129
Total	54	0	35	0	0	0	0	0	43	104	0	0	0	120	67	0	423
05:00 PM	10	0	7	0	0	0	0	0	10	32	0	0	0	31	22	0	112
05:15 PM	7	0	4	0	0	0	0	0	17	24	0	0	0	32	15	0	99
Grand Total	93	0	59	0	0	0	0	0	86	223	0	0	0	223	130	0	814
Apprch %	61.2	0	38.8	0	0	0	0	0	27.8	72.2	0	0	0	63.2	36.8	0	
Total %	11.4	0	7.2	0	0	0	0	0	10.6	27.4	0	0	0	27.4	16	0	

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	HAAWI ST Eastbound					HAAWI ST Westbound					WAIALE RD Northbound					WAIALE RD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	12	0	5	0	17	0	0	0	0	0	1	27	0	0	28	0	29	16	0	45	90
04:30 PM	14	0	12	0	26	0	0	0	0	0	16	20	0	0	36	0	29	18	0	47	109
04:45 PM	14	0	15	0	29	0	0	0	0	0	11	38	0	0	49	0	31	20	0	51	129
05:00 PM	10	0	7	0	17	0	0	0	0	0	10	32	0	0	42	0	31	22	0	53	112
Total Volume	50	0	39	0	89	0	0	0	0	0	38	117	0	0	155	0	120	76	0	196	440
% App. Total	56.2	0	43.8	0		0	0	0	0		24.5	75.5	0	0		0	61.2	38.8	0		
PHF	.893	.000	.650	.000	.767	.000	.000	.000	.000	.000	.594	.770	.000	.000	.791	.000	.968	.864	.000	.925	.853



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Site Code : 00000000
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Groups Printed- Unshifted

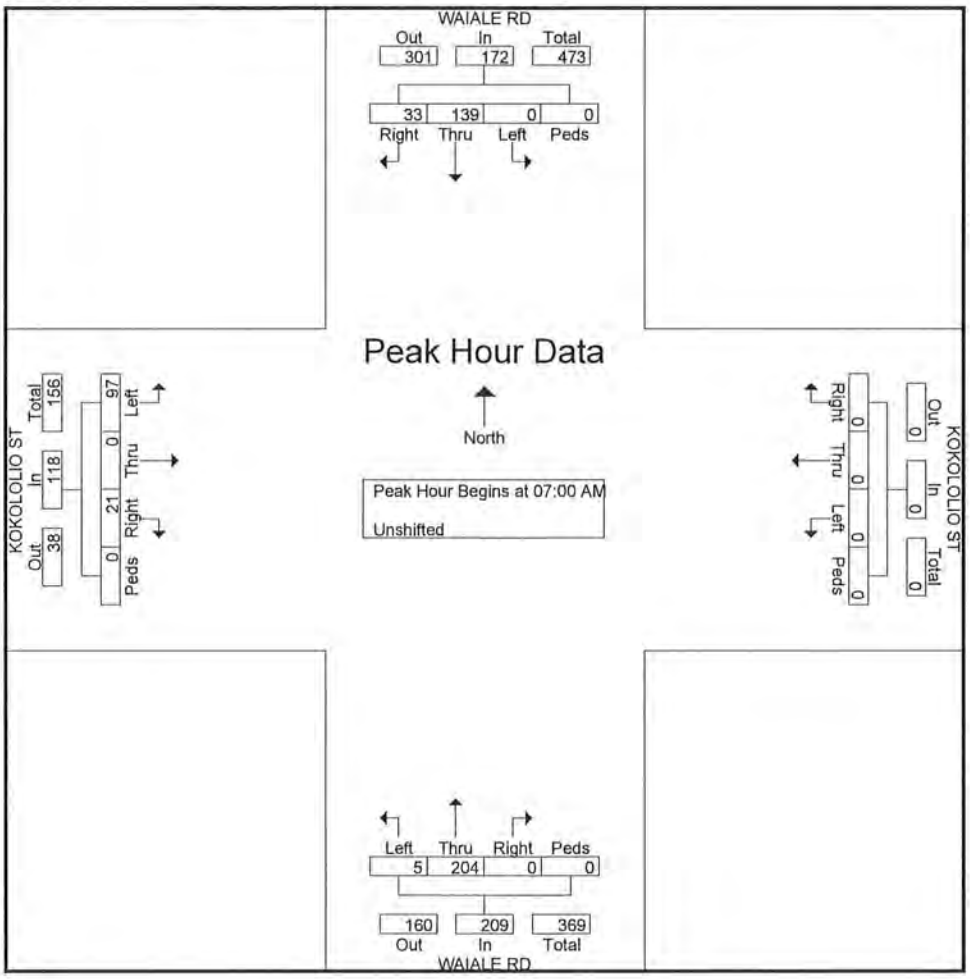
	KOKOLOLIO ST Eastbound				KOKOLOLIO ST Westbound				WAIALE RD Northbound				WAIALE RD Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	23	0	6	0	0	0	0	0	1	29	0	0	0	37	4	0	100
Total	23	0	6	0	0	0	0	0	1	29	0	0	0	37	4	0	100
07:00 AM	20	0	6	0	0	0	0	0	1	59	0	0	0	26	6	0	118
07:15 AM	36	0	7	0	0	0	0	0	1	58	0	0	0	31	9	0	142
07:30 AM	29	0	5	0	0	0	0	0	2	61	0	0	0	36	6	0	139
07:45 AM	12	0	3	0	0	0	0	0	1	26	0	0	0	46	12	0	100
Total	97	0	21	0	0	0	0	0	5	204	0	0	0	139	33	0	499
08:00 AM	10	0	1	0	0	0	0	0	0	26	0	0	0	35	8	0	80
08:15 AM	9	0	1	0	0	0	0	0	2	33	0	0	0	19	7	0	71
Grand Total	139	0	29	0	0	0	0	0	8	292	0	0	0	230	52	0	750
Apprch %	82.7	0	17.3	0	0	0	0	0	2.7	97.3	0	0	0	81.6	18.4	0	
Total %	18.5	0	3.9	0	0	0	0	0	1.1	38.9	0	0	0	30.7	6.9	0	

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	KOKOLOLIO ST Eastbound					KOKOLOLIO ST Westbound					WAIALE RD Northbound					WAIALE RD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	20	0	6	0	26	0	0	0	0	0	1	59	0	0	60	0	26	6	0	32	118
07:15 AM	36	0	7	0	43	0	0	0	0	0	1	58	0	0	59	0	31	9	0	40	142
07:30 AM	29	0	5	0	34	0	0	0	0	0	2	61	0	0	63	0	36	6	0	42	139
07:45 AM	12	0	3	0	15	0	0	0	0	0	1	26	0	0	27	0	46	12	0	58	100
Total Volume	97	0	21	0	118	0	0	0	0	0	5	204	0	0	209	0	139	33	0	172	499
% App. Total	82.2	0	17.8	0		0	0	0	0		2.4	97.6	0	0		0	80.8	19.2	0		
PHF	.674	.000	.750	.000	.686	.000	.000	.000	.000	.000	.625	.836	.000	.000	.829	.000	.755	.688	.000	.741	.879



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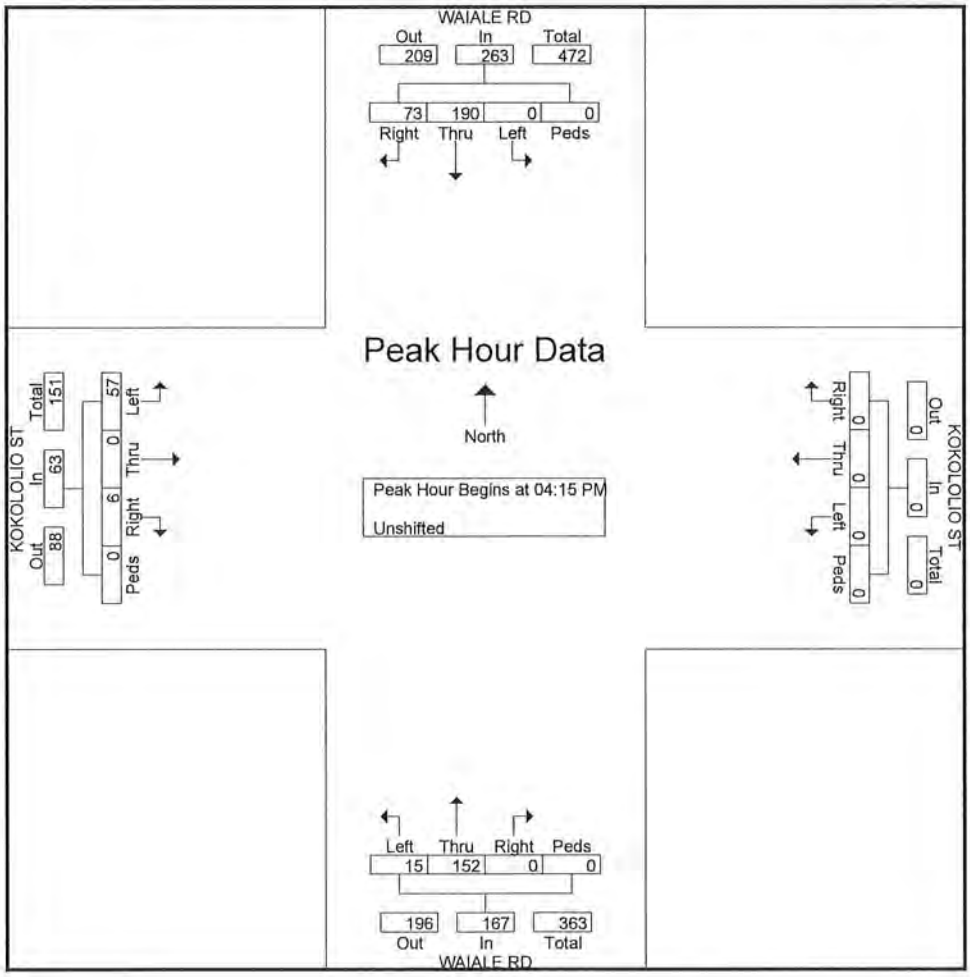
	KOKOLOLIO ST Eastbound				KOKOLOLIO ST Westbound				WAIALE RD Northbound				WAIALE RD Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
03:30 PM	7	0	1	0	0	0	0	0	4	31	0	0	0	29	15	0	87
03:45 PM	17	0	4	0	0	0	0	0	4	46	0	0	0	32	15	0	118
Total	24	0	5	0	0	0	0	0	8	77	0	0	0	61	30	0	205
04:00 PM	17	0	6	0	0	0	0	0	4	29	0	0	0	38	13	0	107
04:15 PM	13	0	1	0	0	0	0	0	3	36	0	0	0	44	13	0	110
04:30 PM	17	0	2	0	0	0	0	0	3	31	0	0	0	45	22	0	120
04:45 PM	14	0	2	0	0	0	0	0	5	47	0	0	0	49	21	0	138
Total	61	0	11	0	0	0	0	0	15	143	0	0	0	176	69	0	475
05:00 PM	13	0	1	0	0	0	0	0	4	38	0	0	0	52	17	0	125
05:15 PM	12	0	6	0	0	0	0	0	9	22	0	0	0	41	16	0	106
Grand Total	110	0	23	0	0	0	0	0	36	280	0	0	0	330	132	0	911
Apprch %	82.7	0	17.3	0	0	0	0	0	11.4	88.6	0	0	0	71.4	28.6	0	
Total %	12.1	0	2.5	0	0	0	0	0	4	30.7	0	0	0	36.2	14.5	0	

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	KOKOLOLIO ST Eastbound					KOKOLOLIO ST Westbound					WAIALE RD Northbound					WAIALE RD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	13	0	1	0	14	0	0	0	0	0	3	36	0	0	39	0	44	13	0	57	110
04:30 PM	17	0	2	0	19	0	0	0	0	0	3	31	0	0	34	0	45	22	0	67	120
04:45 PM	14	0	2	0	16	0	0	0	0	0	5	47	0	0	52	0	49	21	0	70	138
05:00 PM	13	0	1	0	14	0	0	0	0	0	4	38	0	0	42	0	52	17	0	69	125
Total Volume	57	0	6	0	63	0	0	0	0	0	15	152	0	0	167	0	190	73	0	263	493
% App. Total	90.5	0	9.5	0		0	0	0	0		9	91	0	0		0	72.2	27.8	0		
PHF	.838	.000	.750	.000	.829	.000	.000	.000	.000	.000	.750	.809	.000	.000	.803	.000	.913	.830	.000	.939	.893



APPENDIX B

LEVEL OF SERVICE CRITERIA

APPENDIX B – LEVEL OF SERVICE (LOS) CRITERIA

VEHICULAR LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS (HCM 2010)

Level of service for vehicles at signalized intersections is directly related to delay values and is assigned on that basis. Level of Service is a measure of the acceptability of delay values to motorists at a given intersection. The criteria are given in the table below.

Level-of Service Criteria for Signalized Intersections

Level of Service	Control Delay per Vehicle (sec./veh.)
A	< 10.0
B	>10.0 and ≤ 20.0
C	>20.0 and ≤ 35.0
D	>35.0 and ≤ 55.0
E	>55.0 and ≤ 80.0
F	> 80.0

Delay is a complex measure, and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group or approach in question.

VEHICULAR LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS (HCM 2010)

The level of service criteria for vehicles at unsignalized intersections is defined as the average control delay, in seconds per vehicle.

LOS delay threshold values are lower for two-way stop-controlled (TWSC) and all-way stop-controlled (AWSC) intersections than those of signalized intersections. This is because more vehicles pass through signalized intersections, and therefore, drivers expect and tolerate greater delays. While the criteria for level of service for TWSC and AWSC intersections are the same, procedures to calculate the average total delay may differ.

Level of Service Criteria for Two-Way Stop-Controlled Intersections

Level of Service	Average Control Delay (sec/veh)
A	≤ 10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	> 50

APPENDIX C

LEVEL OF SERVICE CALCULATIONS

APPENDIX C

LEVEL OF SERVICE CALCULATIONS

- Existing Conditions AM

HCM 6th Signalized Intersection Summary
1: Honoapiilani Hwy & Kehalani Pkwy

05/22/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	196	333	28	172	110	215	460	10	40	334	99
Future Volume (veh/h)	283	196	333	28	172	110	215	460	10	40	334	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1567	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	404	213	362	30	187	120	234	500	0	43	363	0
Peak Hour Factor	0.70	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	418	556	471	260	248	210	397	648		260	502	
Arrive On Green	0.20	0.30	0.30	0.03	0.13	0.13	0.12	0.35	0.00	0.04	0.27	0.00
Sat Flow, veh/h	1493	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	404	213	362	30	187	120	234	500	0	43	363	0
Grp Sat Flow(s),veh/h/ln	1493	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	15.0	6.9	16.0	1.1	7.4	5.5	6.8	18.3	0.0	1.3	13.5	0.0
Cycle Q Clear(g_c), s	15.0	6.9	16.0	1.1	7.4	5.5	6.8	18.3	0.0	1.3	13.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	418	556	471	260	248	210	397	648		260	502	
V/C Ratio(X)	0.97	0.38	0.77	0.12	0.75	0.57	0.59	0.77		0.17	0.72	
Avail Cap(c_a), veh/h	418	584	495	553	584	495	651	1193		655	1193	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.1	21.4	24.6	27.3	32.1	31.3	17.3	22.4	0.0	19.9	25.5	0.0
Incr Delay (d2), s/veh	35.1	0.2	6.1	0.1	1.7	0.9	0.5	4.2	0.0	0.1	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	3.0	6.6	0.5	3.4	2.1	2.5	8.0	0.0	0.5	6.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	21.6	30.6	27.4	33.8	32.2	17.9	26.6	0.0	20.0	29.7	0.0
LnGrp LOS	E	C	C	C	C	C	B	C		C	C	
Approach Vol, veh/h		979			337			734	A		406	A
Approach Delay, s/veh		40.5			32.7			23.8			28.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	32.6	7.4	28.8	14.0	26.6	20.0	16.2
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	20.0	49.0	15.0	24.0	20.0	49.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	3.3	20.3	3.1	18.0	8.8	15.5	17.0	9.4
Green Ext Time (p_c), s	0.0	6.3	0.0	0.9	0.2	4.4	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	127	63	263	57	221	14	435	331	270	457	7
Future Volume (veh/h)	51	127	63	263	57	221	14	435	331	270	457	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2067	2067	2067	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	138	68	286	62	240	15	473	0	293	497	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	196	185	437	423	566	337	604		421	829	761
Arrive On Green	0.04	0.10	0.10	0.17	0.23	0.23	0.01	0.32	0.00	0.13	0.44	0.44
Sat Flow, veh/h	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	55	138	68	286	62	240	15	473	0	293	497	8
Grp Sat Flow(s),veh/h/ln	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.8	4.6	2.6	9.6	1.9	8.1	0.4	16.2	0.0	7.2	14.3	0.2
Cycle Q Clear(g_c), s	1.8	4.6	2.6	9.6	1.9	8.1	0.4	16.2	0.0	7.2	14.3	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	196	185	437	423	566	337	604		421	829	761
V/C Ratio(X)	0.19	0.70	0.37	0.65	0.15	0.42	0.04	0.78		0.70	0.60	0.01
Avail Cap(c_a), veh/h	326	263	242	540	555	679	469	899		465	1031	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	31.0	29.4	21.5	21.9	17.2	16.1	21.7	0.0	14.7	14.9	9.6
Incr Delay (d2), s/veh	0.3	2.7	0.5	2.0	0.1	0.2	0.0	5.0	0.0	3.0	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.4	1.1	4.1	0.8	2.8	0.2	7.3	0.0	2.8	5.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.7	33.7	29.9	23.6	22.0	17.4	16.1	26.8	0.0	17.8	16.4	9.6
LnGrp LOS	C	C	C	C	C	B	B	C		B	B	A
Approach Vol, veh/h		261			588			488	A		798	
Approach Delay, s/veh		31.4			20.9			26.4			16.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	28.8	15.9	12.7	4.8	37.3	6.6	22.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	11.0	34.0	16.0	9.0	6.0	39.0	4.0	21.0
Max Q Clear Time (g_c+I1), s	10.2	18.2	11.6	6.6	2.4	16.3	3.8	10.1
Green Ext Time (p_c), s	0.1	4.6	0.4	0.1	0.0	5.9	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	64	632	463	58	29	89
Future Vol, veh/h	64	632	463	58	29	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	145	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	687	503	63	32	97

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	566	0	-	0	1362	535
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	827	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1006	-	-	-	163	545
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	430	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1006	-	-	-	152	545
Mov Cap-2 Maneuver	-	-	-	-	152	-
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	430	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1006	-	-	-	152	545
HCM Lane V/C Ratio	0.069	-	-	-	0.207	0.178
HCM Control Delay (s)	8.8	-	-	-	34.8	13
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.7	0.6

HCM 6th Signalized Intersection Summary
4: Waiale Rd & Kuikahi Dr/Maui Lani Pkwy

05/22/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	289	47	29	241	219	112	167	61	249	125	179
Future Volume (veh/h)	360	289	47	29	241	219	112	167	61	249	125	179
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	450	314	51	32	262	238	122	182	66	271	136	195
Peak Hour Factor	0.80	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	555	620	101	336	362	306	290	226	82	398	168	240
Arrive On Green	0.23	0.40	0.40	0.03	0.19	0.19	0.08	0.17	0.17	0.15	0.24	0.24
Sat Flow, veh/h	1781	1570	255	1781	1870	1585	1781	1310	475	1781	695	996
Grp Volume(v), veh/h	450	0	365	32	262	238	122	0	248	271	0	331
Grp Sat Flow(s),veh/h/ln	1781	0	1824	1781	1870	1585	1781	0	1785	1781	0	1691
Q Serve(g_s), s	14.3	0.0	11.6	1.1	10.1	10.9	4.2	0.0	10.2	9.0	0.0	14.2
Cycle Q Clear(g_c), s	14.3	0.0	11.6	1.1	10.1	10.9	4.2	0.0	10.2	9.0	0.0	14.2
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.27	1.00		0.59
Lane Grp Cap(c), veh/h	555	0	721	336	362	306	290	0	308	398	0	408
V/C Ratio(X)	0.81	0.00	0.51	0.10	0.72	0.78	0.42	0.00	0.80	0.68	0.00	0.81
Avail Cap(c_a), veh/h	754	0	928	546	586	496	455	0	512	440	0	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	17.5	23.8	29.0	29.3	23.7	0.0	30.5	20.7	0.0	27.4
Incr Delay (d2), s/veh	4.9	0.0	0.6	0.1	2.8	4.2	1.0	0.0	4.9	3.8	0.0	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	4.8	0.5	4.7	4.4	1.8	0.0	4.7	4.0	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	0.0	18.1	23.9	31.8	33.6	24.7	0.0	35.4	24.4	0.0	36.1
LnGrp LOS	C	A	B	C	C	C	C	A	D	C	A	D
Approach Vol, veh/h		815			532			370			602	
Approach Delay, s/veh		20.3			32.1			31.9			30.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	19.2	6.0	36.3	9.9	24.5	21.4	20.8
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	13.0	22.0	11.0	39.0	13.0	22.0	26.0	24.0
Max Q Clear Time (g_c+I1), s	11.0	12.2	3.1	13.6	6.2	16.2	16.3	12.9
Green Ext Time (p_c), s	0.2	1.0	0.0	2.5	0.1	1.0	1.1	1.9

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	62.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	153	116	101	50	147	127	176	241	71	169	179	203
Future Vol, veh/h	153	116	101	50	147	127	176	241	71	169	179	203
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	166	126	110	54	160	138	191	262	77	184	195	221
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	82.3	57.4	43.3	68.1
HCM LOS	F	F	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	41%	15%	100%	0%
Vol Thru, %	0%	77%	31%	45%	0%	47%
Vol Right, %	0%	23%	27%	39%	0%	53%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	176	312	370	324	169	382
LT Vol	176	0	153	50	169	0
Through Vol	0	241	116	147	0	179
RT Vol	0	71	101	127	0	203
Lane Flow Rate	191	339	402	352	184	415
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.536	0.885	1.018	0.906	0.507	1.041
Departure Headway (Hd)	10.41	9.715	9.42	9.587	10.253	9.334
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	348	376	390	380	355	390
Service Time	8.11	7.415	7.42	7.587	7.953	7.034
HCM Lane V/C Ratio	0.549	0.902	1.031	0.926	0.518	1.064
HCM Control Delay	24.5	53.9	82.3	57.4	23	88
HCM Lane LOS	C	F	F	F	C	F
HCM 95th-tile Q	3	8.7	12.5	9.3	2.7	13.3

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	99	47	26	790	529	30
Future Vol, veh/h	99	47	26	790	529	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	51	28	859	575	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1507	592	608	0	-	0
Stage 1	592	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	133	506	970	-	-	-
Stage 1	553	-	-	-	-	-
Stage 2	390	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	126	506	970	-	-	-
Mov Cap-2 Maneuver	126	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	390	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	79.1	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	970	-	126	506	-	-
HCM Lane V/C Ratio	0.029	-	0.854	0.101	-	-
HCM Control Delay (s)	8.8	0	110.5	12.9	-	-
HCM Lane LOS	A	A	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	5.3	0.3	-	-

Intersection	
Int Delay, s/veh	40.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	144	32	28	921	565	167
Future Vol, veh/h	144	32	28	921	565	167
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	157	35	30	1001	614	182

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1766	705	796	0	-	0
Stage 1	705	-	-	-	-	-
Stage 2	1061	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 92	436	826	-	-	-
Stage 1	490	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 84	436	826	-	-	-
Mov Cap-2 Maneuver	~ 84	-	-	-	-	-
Stage 1	450	-	-	-	-	-
Stage 2	333	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 422.7	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	826	-	84	436	-	-
HCM Lane V/C Ratio	0.037	-	1.863	0.08	-	-
HCM Control Delay (s)	9.5	0	$ 513.5	14	-	-
HCM Lane LOS	A	A	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	13.4	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	49

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	192	45	522	635	42	493
Future Vol, veh/h	192	45	522	635	42	493
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	145	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	209	49	567	690	46	536

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1540	912	0	0	1257	0
Stage 1	912	-	-	-	-	-
Stage 2	628	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 127	332	-	-	553	-
Stage 1	392	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 112	332	-	-	553	-
Mov Cap-2 Maneuver	~ 112	-	-	-	-	-
Stage 1	346	-	-	-	-	-
Stage 2	532	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s$	396.8	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	112	332	553	-
HCM Lane V/C Ratio	-	-	1.863	0.147	0.083	-
HCM Control Delay (s)	-	-	$ 485.7	17.7	12.1	0
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	16.8	0.5	0.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	57.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	9	144	0	11	7	146	353	6	5	420	118
Future Vol, veh/h	83	9	144	0	11	7	146	353	6	5	420	118
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	90	10	157	0	12	8	159	384	7	5	457	128
Number of Lanes	1	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	13.4	12.3	60.8	75.7
HCM LOS	B	B	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	29%	0%	100%	0%	0%	1%
Vol Thru, %	71%	0%	0%	6%	61%	77%
Vol Right, %	0%	100%	0%	94%	39%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	499	6	83	153	18	543
LT Vol	146	0	83	0	0	5
Through Vol	353	0	0	9	11	420
RT Vol	0	6	0	144	7	118
Lane Flow Rate	542	7	90	166	20	590
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.989	0.01	0.206	0.329	0.047	1.045
Departure Headway (Hd)	6.561	5.697	8.449	7.251	8.878	6.373
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	548	622	428	499	406	567
Service Time	4.357	3.492	6.149	4.951	6.878	4.47
HCM Lane V/C Ratio	0.989	0.011	0.21	0.333	0.049	1.041
HCM Control Delay	61.4	8.6	13.3	13.5	12.3	75.7
HCM Lane LOS	F	A	B	B	B	F
HCM 95th-tile Q	13.8	0	0.8	1.4	0.1	16.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	16	7	64	4	44	2	573	67	127	638	9
Future Volume (veh/h)	27	16	7	64	4	44	2	573	67	127	638	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	17	8	70	4	48	2	623	73	138	693	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	131	312	215	27	114	375	862	101	421	1147	972
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.00	0.52	0.52	0.09	0.61	0.61
Sat Flow, veh/h	910	664	1585	753	137	578	1781	1643	193	1781	1870	1585
Grp Volume(v), veh/h	46	0	8	122	0	0	2	0	696	138	693	10
Grp Sat Flow(s),veh/h/ln	1575	0	1585	1468	0	0	1781	0	1836	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.3	4.4	0.0	0.0	0.0	0.0	24.7	2.6	19.3	0.2
Cycle Q Clear(g_c), s	1.8	0.0	0.3	6.2	0.0	0.0	0.0	0.0	24.7	2.6	19.3	0.2
Prop In Lane	0.63		1.00	0.57		0.39	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	379	0	312	356	0	0	375	0	963	421	1147	972
V/C Ratio(X)	0.12	0.00	0.03	0.34	0.00	0.00	0.01	0.00	0.72	0.33	0.60	0.01
Avail Cap(c_a), veh/h	508	0	448	481	0	0	707	0	963	595	1147	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	27.6	29.9	0.0	0.0	10.4	0.0	15.5	11.2	10.1	6.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	4.7	0.2	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.1	2.2	0.0	0.0	0.0	0.0	10.6	0.9	7.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	0.0	27.6	30.1	0.0	0.0	10.4	0.0	20.2	11.3	12.5	6.4
LnGrp LOS	C	A	C	C	A	A	B	A	C	B	B	A
Approach Vol, veh/h		54			122			698			841	
Approach Delay, s/veh		28.1			30.1			20.2			12.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.7	50.6		22.7	4.1	58.1		22.7
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	16.0	29.0		24.0	16.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	14.6	26.7		3.8	2.0	21.3		8.2
Green Ext Time (p_c), s	0.1	1.5		0.1	0.0	4.3		0.4

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	164	54	63	181	61
Future Vol, veh/h	53	164	54	63	181	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	178	59	68	197	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	127	0	-	0	387	93
Stage 1	-	-	-	-	93	-
Stage 2	-	-	-	-	294	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1459	-	-	-	616	964
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	756	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1459	-	-	-	589	964
Mov Cap-2 Maneuver	-	-	-	-	589	-
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	756	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1459	-	-	-	653
HCM Lane V/C Ratio	0.039	-	-	-	0.403
HCM Control Delay (s)	7.6	0	-	-	14.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.9

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	25	6	111	211	8
Future Vol, veh/h	18	25	6	111	211	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	27	7	121	229	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	369	234	238	0	-	0
Stage 1	234	-	-	-	-	-
Stage 2	135	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	631	805	1329	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	891	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	627	805	1329	-	-	-
Mov Cap-2 Maneuver	627	-	-	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	891	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1329	-	627	805	-	-
HCM Lane V/C Ratio	0.005	-	0.031	0.034	-	-
HCM Control Delay (s)	7.7	0	10.9	9.6	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	19	3	122	194	8
Future Vol, veh/h	24	19	3	122	194	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	21	3	133	211	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	355	216	220	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	139	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	643	824	1349	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	642	824	1349	-	-	-
Mov Cap-2 Maneuver	642	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	888	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1349	-	711	-	-
HCM Lane V/C Ratio	0.002	-	0.066	-	-
HCM Control Delay (s)	7.7	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	74	77	11	135	125	35
Future Vol, veh/h	74	77	11	135	125	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	84	12	147	136	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	326	155	174	0	-	0
Stage 1	155	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	668	891	1403	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	662	891	1403	-	-	-
Mov Cap-2 Maneuver	662	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1403	-	762	-	-
HCM Lane V/C Ratio	0.009	-	0.215	-	-
HCM Control Delay (s)	7.6	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	97	21	5	204	139	33
Future Vol, veh/h	97	21	5	204	139	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	105	23	5	222	151	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	401	169	187	0	-	0
Stage 1	169	-	-	-	-	-
Stage 2	232	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	605	875	1387	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	807	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	603	875	1387	-	-	-
Mov Cap-2 Maneuver	603	-	-	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	807	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1387	-	603	875	-	-
HCM Lane V/C Ratio	0.004	-	0.175	0.026	-	-
HCM Control Delay (s)	7.6	0	12.2	9.2	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	0	499	0	0	564
Future Vol, veh/h	26	0	499	0	0	564
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	0	542	0	0	613

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1155	-	0	-	-	-
Stage 1	542	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	-	-
Pot Cap-1 Maneuver	218	0	-	0	0	-
Stage 1	583	0	-	0	0	-
Stage 2	541	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	218	-	-	-	-	-
Mov Cap-2 Maneuver	218	-	-	-	-	-
Stage 1	583	-	-	-	-	-
Stage 2	541	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	218	-
HCM Lane V/C Ratio	-	0.13	-
HCM Control Delay (s)	-	24	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.4	-

APPENDIX C

LEVEL OF SERVICE CALCULATIONS

- Existing Conditions PM

HCM 6th Signalized Intersection Summary
1: Honoapiilani Hwy & Kehalani Pkwy

05/22/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	53	118	13	88	71	133	378	25	96	504	194
Future Volume (veh/h)	106	53	118	13	88	71	133	378	25	96	504	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	58	128	14	96	77	145	411	0	104	548	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	290	246	256	166	141	371	743		462	729	
Arrive On Green	0.08	0.16	0.16	0.02	0.09	0.09	0.08	0.40	0.00	0.07	0.39	0.00
Sat Flow, veh/h	1594	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	115	58	128	14	96	77	145	411	0	104	548	0
Grp Sat Flow(s),veh/h/ln	1594	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.8	1.6	4.5	0.4	3.0	2.8	2.9	10.3	0.0	2.0	15.4	0.0
Cycle Q Clear(g_c), s	3.8	1.6	4.5	0.4	3.0	2.8	2.9	10.3	0.0	2.0	15.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	290	246	256	166	141	371	743		462	729	
V/C Ratio(X)	0.39	0.20	0.52	0.05	0.58	0.55	0.39	0.55		0.23	0.75	
Avail Cap(c_a), veh/h	555	739	626	665	739	626	823	1201		927	1201	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.7	22.4	23.6	24.4	26.6	26.5	11.8	14.1	0.0	10.4	16.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.6	0.0	1.2	1.2	0.2	1.4	0.0	0.1	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.7	1.7	0.2	1.3	1.1	0.9	3.9	0.0	0.7	6.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	22.5	24.2	24.5	27.7	27.7	12.0	15.5	0.0	10.5	19.3	0.0
LnGrp LOS	C	C	C	C	C	C	B	B		B	B	
Approach Vol, veh/h		301			187			556	A		652	A
Approach Delay, s/veh		23.0			27.5			14.6			17.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	30.1	6.1	15.4	9.6	29.7	10.1	11.4
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	20.0	39.0	15.0	24.0	20.0	39.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	4.0	12.3	2.4	6.5	4.9	17.4	5.8	5.0
Green Ext Time (p_c), s	0.1	4.8	0.0	0.4	0.1	6.3	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	66	24	391	97	169	37	371	339	190	442	31
Future Volume (veh/h)	8	66	24	391	97	169	37	371	339	190	442	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2067	2067	2067	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	72	26	425	105	184	40	403	0	207	480	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	180	195	589	580	658	278	534		379	685	595
Arrive On Green	0.01	0.09	0.09	0.23	0.31	0.31	0.02	0.29	0.00	0.10	0.37	0.37
Sat Flow, veh/h	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	9	72	26	425	105	184	40	403	0	207	480	34
Grp Sat Flow(s),veh/h/ln	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	2.3	0.9	14.1	2.8	5.3	1.1	13.5	0.0	5.3	15.1	0.9
Cycle Q Clear(g_c), s	0.3	2.3	0.9	14.1	2.8	5.3	1.1	13.5	0.0	5.3	15.1	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	180	195	589	580	658	278	534		379	685	595
V/C Ratio(X)	0.04	0.40	0.13	0.72	0.18	0.28	0.14	0.75		0.55	0.70	0.06
Avail Cap(c_a), veh/h	324	270	271	589	580	658	390	923		477	1059	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	29.7	27.6	19.4	17.4	13.3	17.5	22.4	0.0	15.4	18.6	13.7
Incr Delay (d2), s/veh	0.1	0.5	0.1	4.3	0.1	0.1	0.1	4.6	0.0	0.5	2.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.1	0.4	6.2	1.2	1.8	0.4	6.1	0.0	1.9	6.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.3	30.3	27.7	23.7	17.4	13.4	17.6	27.0	0.0	15.8	21.4	13.8
LnGrp LOS	C	C	C	C	B	B	B	C		B	C	B
Approach Vol, veh/h		107			714			443	A		721	
Approach Delay, s/veh		29.5			20.1			26.2			19.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	25.7	20.0	12.0	5.7	31.2	4.6	27.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	7.0	34.0	16.0	9.0	6.0	39.0	4.0	21.0
Max Q Clear Time (g_c+I1), s	7.3	15.5	16.1	4.3	3.1	17.1	2.3	7.3
Green Ext Time (p_c), s	0.1	4.1	0.0	0.1	0.0	5.8	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	97	469	482	82	34	130
Future Vol, veh/h	97	469	482	82	34	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	145	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	105	510	524	89	37	141

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	613	0	-	0	1289	569
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	720	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	966	-	-	-	181	522
Stage 1	-	-	-	-	566	-
Stage 2	-	-	-	-	482	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	966	-	-	-	161	522
Mov Cap-2 Maneuver	-	-	-	-	161	-
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	482	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	966	-	-	-	161	522
HCM Lane V/C Ratio	0.109	-	-	-	0.23	0.271
HCM Control Delay (s)	9.2	-	-	-	33.9	14.4
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.8	1.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	249	195	55	65	307	237	46	110	33	283	163	233
Future Volume (veh/h)	249	195	55	65	307	237	46	110	33	283	163	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	271	212	60	71	334	258	50	120	36	308	177	253
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	419	466	132	422	432	366	219	228	69	501	203	290
Arrive On Green	0.15	0.33	0.33	0.04	0.23	0.23	0.04	0.17	0.17	0.16	0.29	0.29
Sat Flow, veh/h	1781	1402	397	1781	1870	1585	1781	1381	414	1781	696	995
Grp Volume(v), veh/h	271	0	272	71	334	258	50	0	156	308	0	430
Grp Sat Flow(s),veh/h/ln	1781	0	1799	1781	1870	1585	1781	0	1796	1781	0	1691
Q Serve(g_s), s	7.2	0.0	8.1	2.0	11.3	10.1	1.6	0.0	5.4	9.1	0.0	16.4
Cycle Q Clear(g_c), s	7.2	0.0	8.1	2.0	11.3	10.1	1.6	0.0	5.4	9.1	0.0	16.4
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.23	1.00		0.59
Lane Grp Cap(c), veh/h	419	0	598	422	432	366	219	0	297	501	0	494
V/C Ratio(X)	0.65	0.00	0.46	0.17	0.77	0.71	0.23	0.00	0.53	0.61	0.00	0.87
Avail Cap(c_a), veh/h	843	0	1036	632	663	562	444	0	636	501	0	599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	17.8	18.5	24.4	23.9	22.7	0.0	25.8	17.4	0.0	22.8
Incr Delay (d2), s/veh	1.7	0.0	0.5	0.2	3.1	2.5	0.5	0.0	1.4	2.2	0.0	11.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	3.3	0.8	5.2	3.9	0.7	0.0	2.3	3.8	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	18.3	18.7	27.5	26.4	23.2	0.0	27.3	19.7	0.0	34.2
LnGrp LOS	B	A	B	B	C	C	C	A	C	B	A	C
Approach Vol, veh/h		543			663			206			738	
Approach Delay, s/veh		18.0			26.1			26.3			28.2	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	17.2	7.0	28.5	6.4	25.8	13.9	21.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	11.0	24.0	11.0	39.0	11.0	24.0	26.0	24.0
Max Q Clear Time (g_c+I1), s	11.1	7.4	4.0	10.1	3.6	18.4	9.2	13.3
Green Ext Time (p_c), s	0.0	0.7	0.1	1.8	0.0	1.4	0.7	2.3

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	67.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	206	171	75	46	177	208	62	99	27	153	112	255
Future Vol, veh/h	206	171	75	46	177	208	62	99	27	153	112	255
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	224	186	82	50	192	226	67	108	29	166	122	277
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	109.2	76.9	17.4	42.2
HCM LOS	F	F	C	E

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	46%	11%	100%	0%
Vol Thru, %	0%	79%	38%	41%	0%	31%
Vol Right, %	0%	21%	17%	48%	0%	69%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	126	452	431	153	367
LT Vol	62	0	206	46	153	0
Through Vol	0	99	171	177	0	112
RT Vol	0	27	75	208	0	255
Lane Flow Rate	67	137	491	468	166	399
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.189	0.359	1.122	1.018	0.421	0.9
Departure Headway (Hd)	10.689	10.002	8.221	8.25	9.62	8.586
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	338	362	442	445	378	427
Service Time	8.389	7.702	6.321	6.25	7.32	6.286
HCM Lane V/C Ratio	0.198	0.378	1.111	1.052	0.439	0.934
HCM Control Delay	15.9	18.2	109.2	76.9	19.1	51.9
HCM Lane LOS	C	C	F	F	C	F
HCM 95th-tile Q	0.7	1.6	17.2	13.4	2	9.6

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	32	44	672	631	22
Future Vol, veh/h	29	32	44	672	631	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	35	48	730	686	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1524	698	710	0	-	0
Stage 1	698	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	130	440	889	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	430	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	118	440	889	-	-	-
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	449	-	-	-	-	-
Stage 2	430	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29.3	0.6	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	889	-	118	440	-	-
HCM Lane V/C Ratio	0.054	-	0.267	0.079	-	-
HCM Control Delay (s)	9.3	0	46.3	13.9	-	-
HCM Lane LOS	A	A	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1	0.3	-	-

Intersection	
Int Delay, s/veh	12.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	104	18	27	716	661	151
Future Vol, veh/h	104	18	27	716	661	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	113	20	29	778	718	164

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1636	800	882	0	-	0
Stage 1	800	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 111	385	767	-	-	-
Stage 1	442	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 104	385	767	-	-	-
Mov Cap-2 Maneuver	~ 104	-	-	-	-	-
Stage 1	412	-	-	-	-	-
Stage 2	425	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	164.8	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	767	-	104	385	-	-
HCM Lane V/C Ratio	0.038	-	1.087	0.051	-	-
HCM Control Delay (s)	9.9	0	190.8	14.9	-	-
HCM Lane LOS	A	A	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	7.1	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	50.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	206	45	405	225	68	626
Future Vol, veh/h	206	45	405	225	68	626
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	145	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	224	49	440	245	74	680

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1391	563	0	0	685	0
Stage 1	563	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 157	526	-	-	908	-
Stage 1	570	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 136	526	-	-	908	-
Mov Cap-2 Maneuver	~ 136	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	429	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s$	313.1	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	136	526	908	-
HCM Lane V/C Ratio	-	-	1.646	0.093	0.081	-
HCM Control Delay (s)	-	-	$ 378.8	12.5	9.3	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	16.2	0.3	0.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	33.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	9	153	0	0	2	71	361	16	8	477	33
Future Vol, veh/h	25	9	153	0	0	2	71	361	16	8	477	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	10	166	0	0	2	77	392	17	9	518	36
Number of Lanes	1	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	12.5	10.7	27.2	46.4
HCM LOS	B	B	D	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	0%	100%	0%	0%	2%
Vol Thru, %	84%	0%	0%	6%	0%	92%
Vol Right, %	0%	100%	0%	94%	100%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	432	16	25	162	2	518
LT Vol	71	0	25	0	0	8
Through Vol	361	0	0	9	0	477
RT Vol	0	16	0	153	2	33
Lane Flow Rate	470	17	27	176	2	563
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.79	0.025	0.059	0.327	0.005	0.933
Departure Headway (Hd)	6.057	5.262	7.869	6.677	7.662	5.968
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	596	677	454	535	470	608
Service Time	3.811	3.016	5.646	4.453	5.662	4.02
HCM Lane V/C Ratio	0.789	0.025	0.059	0.329	0.004	0.926
HCM Control Delay	27.9	8.2	11.1	12.7	10.7	46.4
HCM Lane LOS	D	A	B	B	B	E
HCM 95th-tile Q	7.6	0.1	0.2	1.4	0	12.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	12	8	60	14	51	5	652	68	47	685	29
Future Volume (veh/h)	12	12	8	60	14	51	5	652	68	47	685	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	13	9	65	15	55	5	709	74	51	745	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	200	338	204	60	134	306	853	89	319	1079	914
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.00	0.51	0.51	0.07	0.58	0.58
Sat Flow, veh/h	714	939	1585	632	280	627	1781	1665	174	1781	1870	1585
Grp Volume(v), veh/h	26	0	9	135	0	0	5	0	783	51	745	32
Grp Sat Flow(s),veh/h/ln	1652	0	1585	1539	0	0	1781	0	1839	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.3	3.5	0.0	0.0	0.1	0.0	28.1	0.9	21.8	0.7
Cycle Q Clear(g_c), s	0.9	0.0	0.3	5.6	0.0	0.0	0.1	0.0	28.1	0.9	21.8	0.7
Prop In Lane	0.50		1.00	0.48		0.41	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	422	0	338	397	0	0	306	0	942	319	1079	914
V/C Ratio(X)	0.06	0.00	0.03	0.34	0.00	0.00	0.02	0.00	0.83	0.16	0.69	0.04
Avail Cap(c_a), veh/h	571	0	490	541	0	0	666	0	1160	563	1180	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	0.0	24.2	26.2	0.0	0.0	10.9	0.0	16.1	12.5	11.6	7.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	5.7	0.1	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	2.1	0.0	0.0	0.0	0.0	11.9	0.3	8.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	0.0	24.2	26.4	0.0	0.0	10.9	0.0	21.8	12.6	13.8	7.1
LnGrp LOS	C	A	C	C	A	A	B	A	C	B	B	A
Approach Vol, veh/h		35			135			788			828	
Approach Delay, s/veh		24.3			26.4			21.7			13.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	45.8		22.6	4.3	50.8		22.6
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	16.0	49.0		24.0	16.0	49.0		24.0
Max Q Clear Time (g_c+I1), s	12.9	30.1		2.9	2.1	23.8		7.6
Green Ext Time (p_c), s	0.0	9.7		0.1	0.0	11.0		0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	59	67	84	124	108	42
Future Vol, veh/h	59	67	84	124	108	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	73	91	135	117	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	226	0	-	0	360	159
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	201	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1342	-	-	-	639	886
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	833	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1342	-	-	-	607	886
Mov Cap-2 Maneuver	-	-	-	-	607	-
Stage 1	-	-	-	-	827	-
Stage 2	-	-	-	-	833	-

Approach	EB	WB	SB
HCM Control Delay, s	3.7	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1342	-	-	-	666
HCM Lane V/C Ratio	0.048	-	-	-	0.245
HCM Control Delay (s)	7.8	0	-	-	12.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	7	18	167	139	16
Future Vol, veh/h	14	7	18	167	139	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	8	20	182	151	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	382	160	168	0	-	0
Stage 1	160	-	-	-	-	-
Stage 2	222	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	620	885	1410	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	610	885	1410	-	-	-
Mov Cap-2 Maneuver	610	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	815	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1410	-	610	885	-	-
HCM Lane V/C Ratio	0.014	-	0.025	0.009	-	-
HCM Control Delay (s)	7.6	0	11.1	9.1	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	12	21	145	142	17
Future Vol, veh/h	10	12	21	145	142	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	13	23	158	154	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	367	163	172	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	204	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	633	882	1405	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	622	882	1405	-	-	-
Mov Cap-2 Maneuver	622	-	-	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	830	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1405	-	741	-	-
HCM Lane V/C Ratio	0.016	-	0.032	-	-
HCM Control Delay (s)	7.6	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	39	38	117	120	76
Future Vol, veh/h	50	39	38	117	120	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	42	41	127	130	83

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	381	172	213	0	-	0
Stage 1	172	-	-	-	-	-
Stage 2	209	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	621	872	1357	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	601	872	1357	-	-	-
Mov Cap-2 Maneuver	601	-	-	-	-	-
Stage 1	830	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	1.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1357	-	696	-	-
HCM Lane V/C Ratio	0.03	-	0.139	-	-
HCM Control Delay (s)	7.7	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	57	6	15	152	190	73
Future Vol, veh/h	57	6	15	152	190	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	7	16	165	207	79

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	444	247	286	0	-	0
Stage 1	247	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	571	792	1276	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	563	792	1276	-	-	-
Mov Cap-2 Maneuver	563	-	-	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	836	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1276	-	563	792	-	-
HCM Lane V/C Ratio	0.013	-	0.11	0.008	-	-
HCM Control Delay (s)	7.9	0	12.2	9.6	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	0	432	0	0	630
Future Vol, veh/h	9	0	432	0	0	630
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	0	470	0	0	685

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1155	-	0	-	-	-
Stage 1	470	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	-	-
Pot Cap-1 Maneuver	218	0	-	0	0	-
Stage 1	629	0	-	0	0	-
Stage 2	500	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	218	-	-	-	-	-
Mov Cap-2 Maneuver	218	-	-	-	-	-
Stage 1	629	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	218	-
HCM Lane V/C Ratio	-	0.045	-
HCM Control Delay (s)	-	22.3	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.1	-

APPENDIX C

LEVEL OF SERVICE CALCULATIONS

- Base Year 2021 AM

HCM 6th Signalized Intersection Summary
1: Honoapiilani Hwy & Kehalani Pkwy

05/22/2018

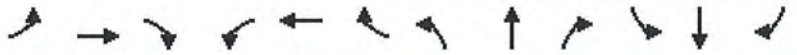
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	225	440	30	190	115	255	545	10	45	430	110
Future Volume (veh/h)	320	225	440	30	190	115	255	545	10	45	430	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1567	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	457	245	478	33	207	125	277	592	0	49	467	0
Peak Hour Factor	0.70	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	521	441	240	261	221	385	748		253	589	
Arrive On Green	0.17	0.28	0.28	0.03	0.14	0.14	0.12	0.40	0.00	0.04	0.32	0.00
Sat Flow, veh/h	1493	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	457	245	478	33	207	125	277	592	0	49	467	0
Grp Sat Flow(s),veh/h/ln	1493	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	15.0	9.6	24.5	1.4	9.4	6.5	8.7	24.4	0.0	1.6	20.0	0.0
Cycle Q Clear(g_c), s	15.0	9.6	24.5	1.4	9.4	6.5	8.7	24.4	0.0	1.6	20.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	521	441	240	261	221	385	748		253	589	
V/C Ratio(X)	1.25	0.47	1.08	0.14	0.79	0.57	0.72	0.79		0.19	0.79	
Avail Cap(c_a), veh/h	365	521	441	488	511	433	568	1043		588	1043	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.7	26.3	31.7	30.8	36.6	35.3	18.9	23.1	0.0	20.6	27.5	0.0
Incr Delay (d2), s/veh	134.2	0.2	66.9	0.1	2.1	0.8	1.0	4.6	0.0	0.1	5.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.3	4.3	17.3	0.6	4.4	2.5	3.3	10.8	0.0	0.6	9.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	162.9	26.6	98.7	30.9	38.7	36.2	19.9	27.8	0.0	20.7	32.6	0.0
LnGrp LOS	F	C	F	C	D	D	B	C		C	C	
Approach Vol, veh/h		1180			365			869	A		516	A
Approach Delay, s/veh		108.6			37.1			25.3			31.5	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	41.2	7.8	30.5	16.0	33.7	20.0	18.2
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	20.0	49.0	15.0	24.0	20.0	49.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	3.6	26.4	3.4	26.5	10.7	22.0	17.0	11.4
Green Ext Time (p_c), s	0.0	7.1	0.0	0.0	0.3	5.7	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	61.4
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	160	75	290	70	275	20	500	400	335	595	10
Future Volume (veh/h)	60	160	75	290	70	275	20	500	400	335	595	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2067	2067	2067	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	174	82	315	76	299	22	543	0	364	647	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	224	216	422	446	590	251	640		390	864	798
Arrive On Green	0.04	0.11	0.11	0.17	0.24	0.24	0.01	0.34	0.00	0.13	0.46	0.46
Sat Flow, veh/h	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	65	174	82	315	76	299	22	543	0	364	647	11
Grp Sat Flow(s),veh/h/ln	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.4	6.7	3.5	12.3	2.6	12.0	0.7	22.1	0.0	10.5	23.3	0.3
Cycle Q Clear(g_c), s	2.4	6.7	3.5	12.3	2.6	12.0	0.7	22.1	0.0	10.5	23.3	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	224	216	422	446	590	251	640		390	864	798
V/C Ratio(X)	0.22	0.78	0.38	0.75	0.17	0.51	0.09	0.85		0.93	0.75	0.01
Avail Cap(c_a), veh/h	305	277	260	422	479	619	356	776		390	890	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	35.5	33.1	24.7	24.8	19.9	18.3	25.0	0.0	17.8	18.1	10.2
Incr Delay (d2), s/veh	0.4	8.0	0.4	7.1	0.1	0.3	0.1	9.4	0.0	28.8	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.9	1.5	5.9	1.2	4.3	0.3	10.8	0.0	6.9	10.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	43.6	33.5	31.8	24.9	20.1	18.4	34.3	0.0	46.6	22.4	10.2
LnGrp LOS	C	D	C	C	C	C	B	C		D	C	B
Approach Vol, veh/h		321			690			565	A		1022	
Approach Delay, s/veh		38.5			26.0			33.7			30.9	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	34.0	18.0	14.9	5.2	43.9	7.4	25.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	1.0	34.0	14.0	11.0	6.0	39.0	4.0	21.0
Max Q Clear Time (g_c+I1), s	2.5	24.1	14.3	8.7	2.7	25.3	4.4	14.0
Green Ext Time (p_c), s	0.0	4.0	0.0	0.2	0.0	6.1	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	75	790	555	60	30	95
Future Vol, veh/h	75	790	555	60	30	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	145	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	859	603	65	33	103

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	668	0	-	0	1659	636
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	1023	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	922	-	-	-	107	478
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	347	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	922	-	-	-	97	478
Mov Cap-2 Maneuver	-	-	-	-	97	-
Stage 1	-	-	-	-	480	-
Stage 2	-	-	-	-	347	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	25.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	922	-	-	-	97	478
HCM Lane V/C Ratio	0.088	-	-	-	0.336	0.216
HCM Control Delay (s)	9.3	-	-	-	59.9	14.6
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	0.3	-	-	-	1.3	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	385	75	50	285	240	145	235	105	285	215	195
Future Volume (veh/h)	400	385	75	50	285	240	145	235	105	285	215	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	500	418	77	54	310	31	158	255	101	310	234	182
Peak Hour Factor	0.80	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	534	615	113	290	363	308	273	293	116	363	299	232
Arrive On Green	0.24	0.40	0.40	0.03	0.19	0.19	0.07	0.23	0.23	0.14	0.31	0.31
Sat Flow, veh/h	1781	1536	283	1781	1870	1585	1781	1275	505	1781	975	759
Grp Volume(v), veh/h	500	0	495	54	310	31	158	0	356	310	0	416
Grp Sat Flow(s),veh/h/ln	1781	0	1819	1781	1870	1585	1781	0	1779	1781	0	1734
Q Serve(g_s), s	22.3	0.0	23.4	2.5	16.7	1.7	7.0	0.0	20.1	13.4	0.0	22.9
Cycle Q Clear(g_c), s	22.3	0.0	23.4	2.5	16.7	1.7	7.0	0.0	20.1	13.4	0.0	22.9
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.28	1.00		0.44
Lane Grp Cap(c), veh/h	534	0	729	290	363	308	273	0	409	363	0	531
V/C Ratio(X)	0.94	0.00	0.68	0.19	0.85	0.10	0.58	0.00	0.87	0.85	0.00	0.78
Avail Cap(c_a), veh/h	600	0	837	433	555	471	273	0	597	363	0	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.0	0.0	25.8	32.0	40.6	34.6	29.9	0.0	38.7	26.3	0.0	33.1
Incr Delay (d2), s/veh	20.9	0.0	1.9	0.3	7.9	0.1	3.0	0.0	9.4	17.7	0.0	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	0.0	10.4	1.1	8.5	0.7	3.3	0.0	9.8	7.4	0.0	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	0.0	27.6	32.3	48.5	34.7	32.9	0.0	48.1	44.0	0.0	37.1
LnGrp LOS	D	A	C	C	D	C	C	A	D	D	A	D
Approach Vol, veh/h		995			395			514			726	
Approach Delay, s/veh		36.3			45.2			43.4			40.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	30.0	7.6	47.8	11.0	38.0	29.1	26.3
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	15.0	35.0	12.0	48.0	7.0	43.0	29.0	31.0
Max Q Clear Time (g_c+I1), s	15.4	22.1	4.5	25.4	9.0	24.9	24.3	18.7
Green Ext Time (p_c), s	0.0	1.9	0.0	3.5	0.0	2.7	0.8	1.6

Intersection Summary	
HCM 6th Ctrl Delay	40.1
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	24.1
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	543	412	598	707
Demand Flow Rate, veh/h	553	420	611	722
Vehicles Circulating, veh/h	494	748	587	509
Vehicles Exiting, veh/h	737	450	460	659
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	15.9	19.0	25.7	31.8
Approach LOS	C	C	D	D

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	553	420	611	722
Cap Entry Lane, veh/h	834	643	758	821
Entry HV Adj Factor	0.981	0.980	0.979	0.979
Flow Entry, veh/h	543	412	598	707
Cap Entry, veh/h	818	631	742	804
V/C Ratio	0.663	0.653	0.806	0.879
Control Delay, s/veh	15.9	19.0	25.7	31.8
LOS	C	C	D	D
95th %tile Queue, veh	5	5	8	11

Intersection	
Int Delay, s/veh	18.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	100	50	30	920	670	30
Future Vol, veh/h	100	50	30	920	670	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	54	33	1000	728	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1811	745	761	0	-	0
Stage 1	745	-	-	-	-	-
Stage 2	1066	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 86	414	851	-	-	-
Stage 1	469	-	-	-	-	-
Stage 2	331	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 79	414	851	-	-	-
Mov Cap-2 Maneuver	~ 79	-	-	-	-	-
Stage 1	428	-	-	-	-	-
Stage 2	331	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	220.5	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	851	-	79	414	-	-
HCM Lane V/C Ratio	0.038	-	1.376	0.131	-	-
HCM Control Delay (s)	9.4	0$	323.2	15	-	-
HCM Lane LOS	A	A	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	8.5	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	75.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	145	35	30	1060	710	170
Future Vol, veh/h	145	35	30	1060	710	170
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	158	38	33	1152	772	185

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2083	865	957	0	-	0
Stage 1	865	-	-	-	-	-
Stage 2	1218	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 58	353	719	-	-	-
Stage 1	412	-	-	-	-	-
Stage 2	280	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 51	353	719	-	-	-
Mov Cap-2 Maneuver	~ 51	-	-	-	-	-
Stage 1	359	-	-	-	-	-
Stage 2	280	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s$	898.2	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	719	-	51	353	-	-
HCM Lane V/C Ratio	0.045	-	3.09	0.108	-	-
HCM Control Delay (s)	10.2	$	1111.1	16.4	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	16.8	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	116.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	230	45	580	710	45	595
Future Vol, veh/h	230	45	580	710	45	595
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	145	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	250	49	630	772	49	647

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1761	1016	0	0	1402	0
Stage 1	1016	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 93	289	-	-	487	-
Stage 1	350	-	-	-	-	-
Stage 2	469	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 78	289	-	-	487	-
Mov Cap-2 Maneuver	~ 78	-	-	-	-	-
Stage 1	295	-	-	-	-	-
Stage 2	469	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 928.7	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	78	289	487	-
HCM Lane V/C Ratio	-	-	3.205	0.169	0.1	-
HCM Control Delay (s)	-	-	$ 1106.5	20	13.2	0
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	25.2	0.6	0.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	107.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	10	220	30	15	10	160	400	10	5	450	120
Future Vol, veh/h	85	10	220	30	15	10	160	400	10	5	450	120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	11	239	33	16	11	174	435	11	5	489	130
Number of Lanes	1	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	17.5	15.2	133.6	138.6
HCM LOS	C	C	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	29%	0%	100%	0%	55%	1%
Vol Thru, %	71%	0%	0%	4%	27%	78%
Vol Right, %	0%	100%	0%	96%	18%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	560	10	85	230	55	575
LT Vol	160	0	85	0	30	5
Through Vol	400	0	0	10	15	450
RT Vol	0	10	0	220	10	120
Lane Flow Rate	609	11	92	250	60	625
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	1.207	0.019	0.218	0.505	0.153	1.215
Departure Headway (Hd)	7.496	6.628	9.215	7.994	10.352	7.376
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	487	543	392	455	349	500
Service Time	5.196	4.328	6.915	5.694	8.352	5.376
HCM Lane V/C Ratio	1.251	0.02	0.235	0.549	0.172	1.25
HCM Control Delay	135.8	9.5	14.5	18.6	15.2	138.6
HCM Lane LOS	F	A	B	C	C	F
HCM 95th-tile Q	22.2	0.1	0.8	2.8	0.5	22.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	20	10	95	5	55	5	690	140	160	780	10
Future Volume (veh/h)	30	20	10	95	5	55	5	690	140	160	780	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	22	11	103	5	60	5	750	152	174	848	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	139	316	222	24	99	274	785	159	278	1138	965
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.00	0.52	0.52	0.09	0.61	0.61
Sat Flow, veh/h	823	696	1585	773	122	497	1781	1509	306	1781	1870	1585
Grp Volume(v), veh/h	55	0	11	168	0	0	5	0	902	174	848	11
Grp Sat Flow(s),veh/h/ln	1519	0	1585	1392	0	0	1781	0	1815	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.5	7.5	0.0	0.0	0.1	0.0	40.3	3.3	27.6	0.2
Cycle Q Clear(g_c), s	2.3	0.0	0.5	9.7	0.0	0.0	0.1	0.0	40.3	3.3	27.6	0.2
Prop In Lane	0.60		1.00	0.61		0.36	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	370	0	316	346	0	0	274	0	944	278	1138	965
V/C Ratio(X)	0.15	0.00	0.03	0.49	0.00	0.00	0.02	0.00	0.96	0.63	0.74	0.01
Avail Cap(c_a), veh/h	496	0	448	467	0	0	603	0	944	448	1138	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	27.4	31.4	0.0	0.0	12.0	0.0	19.5	18.5	11.9	6.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	20.3	0.9	4.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.2	3.2	0.0	0.0	0.0	0.0	20.5	1.8	11.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	0.0	27.5	31.7	0.0	0.0	12.1	0.0	39.8	19.3	16.4	6.6
LnGrp LOS	C	A	C	C	A	A	B	A	D	B	B	A
Approach Vol, veh/h		66			168			907			1033	
Approach Delay, s/veh		28.1			31.7			39.6			16.8	
Approach LOS		C			C			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	50.2		22.9	4.3	57.7		22.9				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	16.0	29.0		24.0	16.0	29.0		24.0				
Max Q Clear Time (g_c+I1), s	15.3	42.3		4.3	2.1	29.6		11.7				
Green Ext Time (p_c), s	0.2	0.0		0.2	0.0	0.0		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	17.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	85	235	75	115	295	85
Future Vol, veh/h	85	235	75	115	295	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	255	82	125	321	92

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	207	0	-	0	584	145
Stage 1	-	-	-	-	145	-
Stage 2	-	-	-	-	439	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1364	-	-	-	474	902
Stage 1	-	-	-	-	882	-
Stage 2	-	-	-	-	650	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1364	-	-	-	437	902
Mov Cap-2 Maneuver	-	-	-	-	437	-
Stage 1	-	-	-	-	812	-
Stage 2	-	-	-	-	650	-

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	39.5
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1364	-	-	-	494
HCM Lane V/C Ratio	0.068	-	-	-	0.836
HCM Control Delay (s)	7.8	0	-	-	39.5
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.2	-	-	-	8.4

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	25	10	195	345	10
Future Vol, veh/h	20	25	10	195	345	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	27	11	212	375	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	615	381	386	0	-	0
Stage 1	381	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	455	666	1172	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	805	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	450	666	1172	-	-	-
Mov Cap-2 Maneuver	450	-	-	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	805	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1172	-	450	666	-	-
HCM Lane V/C Ratio	0.009	-	0.048	0.041	-	-
HCM Control Delay (s)	8.1	0	13.4	10.6	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	20	5	210	330	10
Future Vol, veh/h	25	20	5	210	330	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	22	5	228	359	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	603	365	370	0	-	0
Stage 1	365	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	462	680	1189	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	802	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	460	680	1189	-	-	-
Mov Cap-2 Maneuver	460	-	-	-	-	-
Stage 1	698	-	-	-	-	-
Stage 2	802	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1189	-	537	-	-
HCM Lane V/C Ratio	0.005	-	0.091	-	-
HCM Control Delay (s)	8	0	12.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	80	15	220	260	35
Future Vol, veh/h	75	80	15	220	260	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	87	16	239	283	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	573	302	321	0	-	0
Stage 1	302	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	481	738	1239	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	474	738	1239	-	-	-
Mov Cap-2 Maneuver	474	-	-	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.7	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1239	-	581	-	-
HCM Lane V/C Ratio	0.013	-	0.29	-	-
HCM Control Delay (s)	7.9	0	13.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	100	25	5	290	275	35
Future Vol, veh/h	100	25	5	290	275	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	27	5	315	299	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	643	318	337	0	-	0
Stage 1	318	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	438	723	1222	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	732	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	436	723	1222	-	-	-
Mov Cap-2 Maneuver	436	-	-	-	-	-
Stage 1	734	-	-	-	-	-
Stage 2	732	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1222	-	436	723	-	-
HCM Lane V/C Ratio	0.004	-	0.249	0.038	-	-
HCM Control Delay (s)	8	0	16	10.2	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0	-	1	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	0	560	0	0	660
Future Vol, veh/h	30	0	560	0	0	660
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	0	609	0	0	717

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1326	-	0	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	-	-
Pot Cap-1 Maneuver	172	0	-	0	0	-
Stage 1	543	0	-	0	0	-
Stage 2	484	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	172	-	-	-	-	-
Mov Cap-2 Maneuver	172	-	-	-	-	-
Stage 1	543	-	-	-	-	-
Stage 2	484	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.8	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	172	-
HCM Lane V/C Ratio	-	0.19	-
HCM Control Delay (s)	-	30.8	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	0.7	-

APPENDIX C

LEVEL OF SERVICE CALCULATIONS

- Base Year 2021 PM

HCM 6th Signalized Intersection Summary
1: Honoapiilani Hwy & Kehalani Pkwy

05/22/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	95	160	15	125	85	190	500	25	110	630	270
Future Volume (veh/h)	125	95	160	15	125	85	190	500	25	110	630	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	103	174	16	136	92	207	543	0	120	685	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	335	284	240	194	164	328	859		404	800	
Arrive On Green	0.09	0.18	0.18	0.02	0.10	0.10	0.09	0.46	0.00	0.06	0.43	0.00
Sat Flow, veh/h	1594	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	136	103	174	16	136	92	207	543	0	120	685	0
Grp Sat Flow(s),veh/h/ln	1594	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.6	3.7	7.9	0.6	5.5	4.3	4.9	17.2	0.0	2.9	25.7	0.0
Cycle Q Clear(g_c), s	5.6	3.7	7.9	0.6	5.5	4.3	4.9	17.2	0.0	2.9	25.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	335	284	240	194	164	328	859		404	800	
V/C Ratio(X)	0.49	0.31	0.61	0.07	0.70	0.56	0.63	0.63		0.30	0.86	
Avail Cap(c_a), veh/h	435	578	490	551	578	490	626	940		757	940	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.0	27.7	29.4	30.2	33.6	33.1	15.9	16.0	0.0	12.6	20.0	0.0
Incr Delay (d2), s/veh	0.5	0.2	0.8	0.0	1.7	1.1	0.7	1.9	0.0	0.2	8.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.7	3.0	0.3	2.5	1.7	1.7	6.8	0.0	1.0	11.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	27.9	30.2	30.2	35.4	34.2	16.7	17.9	0.0	12.7	28.4	0.0
LnGrp LOS	C	C	C	C	D	C	B	B		B	C	
Approach Vol, veh/h		413			244			750	A		805	A
Approach Delay, s/veh		28.4			34.6			17.6			26.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	41.6	6.5	19.9	12.0	39.2	12.3	14.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	20.0	39.0	15.0	24.0	20.0	39.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	4.9	19.2	2.6	9.9	6.9	27.7	7.6	7.5
Green Ext Time (p_c), s	0.1	6.0	0.0	0.6	0.2	5.6	0.1	0.6

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	90	35	470	140	255	50	460	405	250	545	40
Future Volume (veh/h)	15	90	35	470	140	255	50	460	405	250	545	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2067	2067	2067	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	98	38	511	152	277	54	500	0	272	592	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	148	182	587	599	703	233	566		349	737	648
Arrive On Green	0.01	0.07	0.07	0.26	0.32	0.32	0.03	0.30	0.00	0.12	0.39	0.39
Sat Flow, veh/h	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	16	98	38	511	152	277	54	500	0	272	592	43
Grp Sat Flow(s),veh/h/ln	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.6	3.9	1.7	21.6	5.0	9.9	1.7	21.3	0.0	8.3	23.5	1.4
Cycle Q Clear(g_c), s	0.6	3.9	1.7	21.6	5.0	9.9	1.7	21.3	0.0	8.3	23.5	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	191	148	182	587	599	703	233	566		349	737	648
V/C Ratio(X)	0.08	0.66	0.21	0.87	0.25	0.39	0.23	0.88		0.78	0.80	0.07
Avail Cap(c_a), veh/h	398	222	245	587	599	703	304	626		364	738	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	37.8	34.3	24.4	21.0	15.7	20.7	27.8	0.0	19.1	22.5	15.0
Incr Delay (d2), s/veh	0.2	1.9	0.2	13.4	0.1	0.1	0.2	14.7	0.0	9.0	7.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	0.7	10.9	2.2	3.5	0.7	11.3	0.0	4.0	11.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	39.7	34.5	37.8	21.1	15.8	20.9	42.5	0.0	28.0	29.7	15.1
LnGrp LOS	D	D	C	D	C	B	C	D		C	C	B
Approach Vol, veh/h		152			940			554	A		907	
Approach Delay, s/veh		37.9			28.6			40.4			28.5	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	31.3	26.0	12.0	6.7	38.9	5.2	32.8
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	11.0	28.0	22.0	9.0	6.0	33.0	10.0	21.0
Max Q Clear Time (g_c+I1), s	10.3	23.3	23.6	5.9	3.7	25.5	2.6	11.9
Green Ext Time (p_c), s	0.0	2.0	0.0	0.1	0.0	3.7	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	31.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	120	590	665	90	45	155
Future Vol, veh/h	120	590	665	90	45	155
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	145	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	641	723	98	49	168

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	821	0	-	0	1673	772
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	901	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	808	-	-	-	105	400
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	808	-	-	-	88	400
Mov Cap-2 Maneuver	-	-	-	-	88	-
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	396	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	35.7
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	808	-	-	-	88	400
HCM Lane V/C Ratio	0.161	-	-	-	0.556	0.421
HCM Control Delay (s)	10.3	-	-	-	88.2	20.4
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.6	-	-	-	2.5	2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	270	85	125	425	290	85	215	75	330	275	270
Future Volume (veh/h)	280	270	85	125	425	290	85	215	75	330	275	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	293	83	136	462	73	92	234	68	359	299	259
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	485	137	368	523	443	179	334	97	440	333	289
Arrive On Green	0.14	0.35	0.35	0.07	0.28	0.28	0.04	0.24	0.24	0.16	0.36	0.36
Sat Flow, veh/h	1781	1402	397	1781	1870	1585	1781	1393	405	1781	925	801
Grp Volume(v), veh/h	304	0	376	136	462	73	92	0	302	359	0	558
Grp Sat Flow(s),veh/h/ln	1781	0	1799	1781	1870	1585	1781	0	1798	1781	0	1726
Q Serve(g_s), s	12.5	0.0	18.7	5.8	25.5	3.8	4.0	0.0	16.6	15.9	0.0	33.0
Cycle Q Clear(g_c), s	12.5	0.0	18.7	5.8	25.5	3.8	4.0	0.0	16.6	15.9	0.0	33.0
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.23	1.00		0.46
Lane Grp Cap(c), veh/h	352	0	622	368	523	443	179	0	431	440	0	622
V/C Ratio(X)	0.86	0.00	0.60	0.37	0.88	0.16	0.51	0.00	0.70	0.82	0.00	0.90
Avail Cap(c_a), veh/h	404	0	800	406	693	588	179	0	666	440	0	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	29.2	25.3	37.2	29.3	32.8	0.0	37.5	25.5	0.0	32.6
Incr Delay (d2), s/veh	15.7	0.0	1.0	0.6	10.4	0.2	2.5	0.0	2.1	11.3	0.0	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	8.2	2.5	13.1	1.5	2.0	0.0	7.6	8.0	0.0	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.9	0.0	30.1	25.9	47.5	29.5	35.3	0.0	39.6	36.7	0.0	42.3
LnGrp LOS	D	A	C	C	D	C	D	A	D	D	A	D
Approach Vol, veh/h		680			671			394			917	
Approach Delay, s/veh		34.9			41.2			38.6			40.1	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	31.9	11.7	43.3	8.0	44.9	18.9	36.2
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	17.0	40.0	10.0	48.0	4.0	53.0	18.0	40.0
Max Q Clear Time (g_c+I1), s	17.9	18.6	7.8	20.7	6.0	35.0	14.5	27.5
Green Ext Time (p_c), s	0.0	1.9	0.1	2.6	0.0	3.9	0.3	2.7

Intersection Summary	
HCM 6th Ctrl Delay	38.8
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	22.1
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	711	548	327	712
Demand Flow Rate, veh/h	725	559	333	726
Vehicles Circulating, veh/h	415	609	752	448
Vehicles Exiting, veh/h	759	476	388	720
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	22.3	22.3	14.4	25.2
Approach LOS	C	C	B	D

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	725	559	333	726
Cap Entry Lane, veh/h	904	741	641	874
Entry HV Adj Factor	0.980	0.980	0.981	0.981
Flow Entry, veh/h	711	548	327	712
Cap Entry, veh/h	886	726	628	857
V/C Ratio	0.802	0.754	0.520	0.831
Control Delay, s/veh	22.3	22.3	14.4	25.2
LOS	C	C	B	D
95th %tile Queue, veh	9	7	3	10

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	35	45	855	810	25
Future Vol, veh/h	30	35	45	855	810	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	38	49	929	880	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1921	894	907	0	-	0
Stage 1	894	-	-	-	-	-
Stage 2	1027	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	74	340	750	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	64	340	750	-	-	-
Mov Cap-2 Maneuver	64	-	-	-	-	-
Stage 1	345	-	-	-	-	-
Stage 2	345	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	59.5	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	750	-	64	340	-	-
HCM Lane V/C Ratio	0.065	-	0.51	0.112	-	-
HCM Control Delay (s)	10.1	0	109.2	16.9	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	2	0.4	-	-

Intersection	
Int Delay, s/veh	34

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	105	20	30	900	845	155
Future Vol, veh/h	105	20	30	900	845	155
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	22	33	978	918	168

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2046	1002	1086	0	-	0
Stage 1	1002	-	-	-	-	-
Stage 2	1044	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 62	294	642	-	-	-
Stage 1	355	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 55	294	642	-	-	-
Mov Cap-2 Maneuver	~ 55	-	-	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	339	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s$	555.8	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	642	-	55	294	-	-
HCM Lane V/C Ratio	0.051	-	2.075	0.074	-	-
HCM Control Delay (s)	10.9	0$	658.2	18.2	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	11.2	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	174.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	270	45	525	295	70	760
Future Vol, veh/h	270	45	525	295	70	760
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	145	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	293	49	571	321	76	826

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1710	732	0	0	892	0
Stage 1	732	-	-	-	-	-
Stage 2	978	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 100	421	-	-	760	-
Stage 1	476	-	-	-	-	-
Stage 2	364	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 82	421	-	-	760	-
Mov Cap-2 Maneuver	~ 82	-	-	-	-	-
Stage 1	388	-	-	-	-	-
Stage 2	364	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	1088.5	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	82	421	760	-
HCM Lane V/C Ratio	-	-	3.579	0.116	0.1	-
HCM Control Delay (s)	-	-	$ 1267.5	14.7	10.3	0
HCM Lane LOS	-	-	F	B	B	A
HCM 95th %tile Q(veh)	-	-	30.1	0.4	0.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	80.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	10	245	10	0	5	85	460	20	10	510	35
Future Vol, veh/h	25	10	245	10	0	5	85	460	20	10	510	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	11	266	11	0	5	92	500	22	11	554	38
Number of Lanes	1	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	17.8	13.1	91.1	102.1
HCM LOS	C	B	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	0%	100%	0%	67%	2%
Vol Thru, %	84%	0%	0%	4%	0%	92%
Vol Right, %	0%	100%	0%	96%	33%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	545	20	25	255	15	555
LT Vol	85	0	25	0	10	10
Through Vol	460	0	0	10	0	510
RT Vol	0	20	0	245	5	35
Lane Flow Rate	592	22	27	277	16	603
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	1.098	0.036	0.062	0.535	0.041	1.121
Departure Headway (Hd)	6.904	6.107	8.677	7.46	9.698	6.905
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	533	590	415	488	371	531
Service Time	4.604	3.807	6.377	5.16	7.698	4.905
HCM Lane V/C Ratio	1.111	0.037	0.065	0.568	0.043	1.136
HCM Control Delay	94.1	9	11.9	18.4	13.1	102.1
HCM Lane LOS	F	A	B	C	B	F
HCM 95th-tile Q	18.2	0.1	0.2	3.1	0.1	19.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	15	10	130	20	90	5	790	130	65	855	30
Future Volume (veh/h)	15	15	10	130	20	90	5	790	130	65	855	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	16	11	141	22	98	5	859	141	71	929	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	159	322	201	29	109	250	928	152	231	1218	1032
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.00	0.59	0.59	0.06	0.65	0.65
Sat Flow, veh/h	617	780	1585	749	144	536	1781	1567	257	1781	1870	1585
Grp Volume(v), veh/h	32	0	11	261	0	0	5	0	1000	71	929	33
Grp Sat Flow(s),veh/h/ln	1398	0	1585	1429	0	0	1781	0	1824	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.6	18.7	0.0	0.0	0.1	0.0	55.9	1.5	38.9	0.8
Cycle Q Clear(g_c), s	1.6	0.0	0.6	20.3	0.0	0.0	0.1	0.0	55.9	1.5	38.9	0.8
Prop In Lane	0.50		1.00	0.54		0.38	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	332	0	322	339	0	0	250	0	1080	231	1218	1032
V/C Ratio(X)	0.10	0.00	0.03	0.77	0.00	0.00	0.02	0.00	0.93	0.31	0.76	0.03
Avail Cap(c_a), veh/h	440	0	435	445	0	0	290	0	1130	244	1242	1052
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	36.1	44.3	0.0	0.0	13.9	0.0	20.8	23.3	13.6	7.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	13.1	0.3	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.2	7.5	0.0	0.0	0.0	0.0	25.9	1.1	16.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	36.1	48.4	0.0	0.0	13.9	0.0	33.9	23.6	17.0	7.0
LnGrp LOS	D	A	D	D	A	A	B	A	C	C	B	A
Approach Vol, veh/h		43			261			1005			1033	
Approach Delay, s/veh		36.4			48.4			33.8			17.1	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.1	72.9		29.0	4.4	79.6		29.0
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	8.0	70.0		31.0	3.0	75.0		31.0
Max Q Clear Time (g_c+I1), s	13.5	57.9		3.6	2.1	40.9		22.3
Green Ext Time (p_c), s	0.0	8.9		0.1	0.0	17.5		0.7

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	100	105	150	250	205	85
Future Vol, veh/h	100	105	150	250	205	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	114	163	272	223	92

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	435	0	-	0	631	299
Stage 1	-	-	-	-	299	-
Stage 2	-	-	-	-	332	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1125	-	-	-	445	741
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	727	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1125	-	-	-	399	741
Mov Cap-2 Maneuver	-	-	-	-	399	-
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	727	-

Approach	EB	WB	SB
HCM Control Delay, s	4.2	0	28.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1125	-	-	-	461
HCM Lane V/C Ratio	0.097	-	-	-	0.684
HCM Control Delay (s)	8.5	0	-	-	28.1
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.3	-	-	-	5.1

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	10	20	330	280	20
Future Vol, veh/h	15	10	20	330	280	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	11	22	359	304	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	718	315	326	0	-	0
Stage 1	315	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	396	725	1234	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	387	725	1234	-	-	-
Mov Cap-2 Maneuver	387	-	-	-	-	-
Stage 1	724	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1234	-	387	725	-	-
HCM Lane V/C Ratio	0.018	-	0.042	0.015	-	-
HCM Control Delay (s)	8	0	14.7	10	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	15	25	310	280	20
Future Vol, veh/h	10	15	25	310	280	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	16	27	337	304	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	706	315	326	0	-	0
Stage 1	315	-	-	-	-	-
Stage 2	391	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	402	725	1234	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	391	725	1234	-	-	-
Mov Cap-2 Maneuver	391	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	683	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1234	-	540	-	-
HCM Lane V/C Ratio	0.022	-	0.05	-	-
HCM Control Delay (s)	8	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	40	40	280	260	80
Future Vol, veh/h	50	40	40	280	260	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	43	43	304	283	87

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	717	327	370	0	-	0
Stage 1	327	-	-	-	-	-
Stage 2	390	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	396	714	1189	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	379	714	1189	-	-	-
Mov Cap-2 Maneuver	379	-	-	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	684	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1189	-	479	-	-
HCM Lane V/C Ratio	0.037	-	0.204	-	-
HCM Control Delay (s)	8.1	0	14.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	10	15	315	330	75
Future Vol, veh/h	60	10	15	315	330	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	11	16	342	359	82

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	774	400	441	0	-	0
Stage 1	400	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	367	650	1119	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	360	650	1119	-	-	-
Mov Cap-2 Maneuver	360	-	-	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.3	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1119	-	360	650	-	-
HCM Lane V/C Ratio	0.015	-	0.181	0.017	-	-
HCM Control Delay (s)	8.3	0	17.2	10.6	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	0	550	0	0	735
Future Vol, veh/h	10	0	550	0	0	735
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	0	598	0	0	799

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1397	-	0	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	-	-
Pot Cap-1 Maneuver	155	0	-	0	0	-
Stage 1	549	0	-	0	0	-
Stage 2	443	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	155	-	-	-	-	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	443	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	155	-
HCM Lane V/C Ratio	-	0.07	-
HCM Control Delay (s)	-	30	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	0.2	-

APPENDIX C

LEVEL OF SERVICE CALCULATIONS

- Future Year 2021 AM

HCM 6th Signalized Intersection Summary
1: Honoapiilani Hwy & Kehalani Pkwy

05/22/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	225	445	30	190	115	265	560	10	45	435	110
Future Volume (veh/h)	325	225	445	30	190	115	265	560	10	45	435	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1567	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	464	245	484	33	207	125	288	609	0	49	473	0
Peak Hour Factor	0.70	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	516	437	238	260	220	389	760		248	594	
Arrive On Green	0.17	0.28	0.28	0.03	0.14	0.14	0.13	0.41	0.00	0.04	0.32	0.00
Sat Flow, veh/h	1493	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	464	245	484	33	207	125	288	609	0	49	473	0
Grp Sat Flow(s),veh/h/ln	1493	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	15.0	9.7	24.6	1.4	9.5	6.6	9.1	25.5	0.0	1.6	20.6	0.0
Cycle Q Clear(g_c), s	15.0	9.7	24.6	1.4	9.5	6.6	9.1	25.5	0.0	1.6	20.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	516	437	238	260	220	389	760		248	594	
V/C Ratio(X)	1.29	0.47	1.11	0.14	0.80	0.57	0.74	0.80		0.20	0.80	
Avail Cap(c_a), veh/h	360	516	437	482	504	427	561	1029		578	1029	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.2	26.9	32.2	31.2	37.1	35.8	19.1	23.3	0.0	20.8	27.8	0.0
Incr Delay (d2), s/veh	149.2	0.3	75.1	0.1	2.1	0.9	1.4	5.1	0.0	0.1	5.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	4.3	18.3	0.6	4.5	2.6	3.5	11.3	0.0	0.6	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	178.4	27.1	107.3	31.3	39.3	36.7	20.5	28.4	0.0	20.9	32.9	0.0
LnGrp LOS	F	C	F	C	D	D	C	C		C	C	
Approach Vol, veh/h		1193			365			897	A		522	A
Approach Delay, s/veh		118.5			37.7			25.8			31.8	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	42.2	7.8	30.6	16.4	34.3	20.0	18.4
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	20.0	49.0	15.0	24.0	20.0	49.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	3.6	27.5	3.4	26.6	11.1	22.6	17.0	11.5
Green Ext Time (p_c), s	0.0	7.2	0.0	0.0	0.3	5.7	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	65.5
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	160	75	305	70	300	20	500	405	345	595	10
Future Volume (veh/h)	60	160	75	305	70	300	20	500	405	345	595	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2067	2067	2067	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	174	82	332	76	326	22	543	0	375	647	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	224	216	422	446	590	251	640		390	864	798
Arrive On Green	0.04	0.11	0.11	0.17	0.24	0.24	0.01	0.34	0.00	0.13	0.46	0.46
Sat Flow, veh/h	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	65	174	82	332	76	326	22	543	0	375	647	11
Grp Sat Flow(s),veh/h/ln	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.4	6.7	3.5	13.1	2.6	13.3	0.7	22.1	0.0	10.9	23.3	0.3
Cycle Q Clear(g_c), s	2.4	6.7	3.5	13.1	2.6	13.3	0.7	22.1	0.0	10.9	23.3	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	287	224	216	422	446	590	251	640		390	864	798
V/C Ratio(X)	0.23	0.78	0.38	0.79	0.17	0.55	0.09	0.85		0.96	0.75	0.01
Avail Cap(c_a), veh/h	302	277	260	422	479	619	356	776		390	890	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	35.5	33.1	25.0	24.8	20.3	18.3	25.0	0.0	17.9	18.1	10.2
Incr Delay (d2), s/veh	0.4	8.0	0.4	9.5	0.1	0.5	0.1	9.4	0.0	35.2	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.9	1.5	6.5	1.2	4.8	0.3	10.8	0.0	7.7	10.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	43.6	33.5	34.5	24.9	20.8	18.4	34.3	0.0	53.1	22.4	10.2
LnGrp LOS	C	D	C	C	C	C	B	C		D	C	B
Approach Vol, veh/h		321			734			565	A		1033	
Approach Delay, s/veh		38.5			27.4			33.7			33.4	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	34.0	18.0	14.9	5.2	43.9	7.4	25.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	11.0	34.0	14.0	11.0	6.0	39.0	4.0	21.0
Max Q Clear Time (g_c+I1), s	12.9	24.1	15.1	8.7	2.7	25.3	4.4	15.3
Green Ext Time (p_c), s	0.0	4.0	0.0	0.2	0.0	6.1	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	32.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

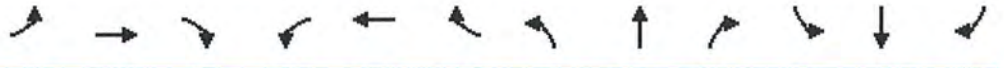
Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	790	10	10	560	60	30	5	30	30	5	95
Future Vol, veh/h	75	790	10	10	560	60	30	5	30	30	5	95
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	145	-	-	50	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	82	859	11	11	609	65	33	5	33	33	5	103

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	674	0	0	870	0	0	1747	1725	865	1712	1698	642
Stage 1	-	-	-	-	-	-	1029	1029	-	664	664	-
Stage 2	-	-	-	-	-	-	718	696	-	1048	1034	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	917	-	-	775	-	-	67	89	353	71	92	474
Stage 1	-	-	-	-	-	-	282	311	-	450	458	-
Stage 2	-	-	-	-	-	-	420	443	-	275	309	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	917	-	-	775	-	-	46	80	353	56	83	474
Mov Cap-2 Maneuver	-	-	-	-	-	-	46	80	-	56	83	-
Stage 1	-	-	-	-	-	-	257	283	-	410	452	-
Stage 2	-	-	-	-	-	-	320	437	-	223	281	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.2	113.1	48.8
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	49	353	917	-	-	775	-	-	59	474
HCM Lane V/C Ratio	0.776	0.092	0.089	-	-	0.014	-	-	0.645	0.218
HCM Control Delay (s)	196.1	16.2	9.3	-	-	9.7	-	-	141.3	14.7
HCM Lane LOS	F	C	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	3.2	0.3	0.3	-	-	0	-	-	2.7	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	425	390	75	50	290	240	150	250	105	285	225	205
Future Volume (veh/h)	425	390	75	50	290	240	150	250	105	285	225	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	531	424	77	54	315	35	163	272	100	310	245	193
Peak Hour Factor	0.80	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	555	642	117	301	364	309	245	305	112	338	297	234
Arrive On Green	0.26	0.42	0.42	0.03	0.19	0.19	0.06	0.23	0.23	0.13	0.31	0.31
Sat Flow, veh/h	1781	1540	280	1781	1870	1585	1781	1304	480	1781	969	764
Grp Volume(v), veh/h	531	0	501	54	315	35	163	0	372	310	0	438
Grp Sat Flow(s),veh/h/ln	1781	0	1820	1781	1870	1585	1781	0	1784	1781	0	1733
Q Serve(g_s), s	26.4	0.0	24.6	2.7	18.1	2.0	7.0	0.0	22.4	14.4	0.0	26.1
Cycle Q Clear(g_c), s	26.4	0.0	24.6	2.7	18.1	2.0	7.0	0.0	22.4	14.4	0.0	26.1
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.27	1.00		0.44
Lane Grp Cap(c), veh/h	555	0	758	301	364	309	245	0	418	338	0	530
V/C Ratio(X)	0.96	0.00	0.66	0.18	0.87	0.11	0.67	0.00	0.89	0.92	0.00	0.83
Avail Cap(c_a), veh/h	563	0	785	432	521	442	245	0	561	338	0	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	26.1	34.1	43.4	36.9	33.8	0.0	41.2	28.6	0.0	35.8
Incr Delay (d2), s/veh	27.2	0.0	2.0	0.3	10.3	0.2	6.7	0.0	13.0	29.1	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	0.0	11.0	1.2	9.5	0.8	3.8	0.0	11.2	8.7	0.0	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.2	0.0	28.1	34.4	53.7	37.0	40.5	0.0	54.2	57.7	0.0	42.6
LnGrp LOS	D	A	C	C	D	D	D	A	D	E	A	D
Approach Vol, veh/h		1032			404			535			748	
Approach Delay, s/veh		41.5			49.6			50.0			48.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	32.0	7.8	52.3	11.0	40.0	32.5	27.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	15.0	35.0	12.0	48.0	7.0	43.0	29.0	31.0
Max Q Clear Time (g_c+I1), s	16.4	24.4	4.7	26.6	9.0	28.1	28.4	20.1
Green Ext Time (p_c), s	0.0	1.6	0.0	3.5	0.0	2.4	0.2	1.5

Intersection Summary	
HCM 6th Ctrl Delay	46.4
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	24.3
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	549	412	598	707
Demand Flow Rate, veh/h	559	420	611	722
Vehicles Circulating, veh/h	494	754	593	509
Vehicles Exiting, veh/h	737	450	460	665
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	16.2	19.3	26.3	31.8
Approach LOS	C	C	D	D

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	559	420	611	722
Cap Entry Lane, veh/h	834	640	754	821
Entry HV Adj Factor	0.981	0.980	0.979	0.979
Flow Entry, veh/h	549	412	598	707
Cap Entry, veh/h	818	627	738	804
V/C Ratio	0.670	0.657	0.811	0.879
Control Delay, s/veh	16.2	19.3	26.3	31.8
LOS	C	C	D	D
95th %tile Queue, veh	5	5	9	11

Intersection	
Int Delay, s/veh	20.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	100	50	30	955	685	30
Future Vol, veh/h	100	50	30	955	685	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	54	33	1038	745	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1866	762	778	0	-	0
Stage 1	762	-	-	-	-	-
Stage 2	1104	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 80	405	839	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	317	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 73	405	839	-	-	-
Mov Cap-2 Maneuver	~ 73	-	-	-	-	-
Stage 1	418	-	-	-	-	-
Stage 2	317	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	256.3	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	839	-	73	405	-	-
HCM Lane V/C Ratio	0.039	-	1.489	0.134	-	-
HCM Control Delay (s)	9.5	0$	376.8	15.3	-	-
HCM Lane LOS	A	A	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	9	0.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	82.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	145	35	30	1095	725	170
Future Vol, veh/h	145	35	30	1095	725	170
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	158	38	33	1190	788	185

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2137	881	973	0	-	0
Stage 1	881	-	-	-	-	-
Stage 2	1256	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 54	346	709	-	-	-
Stage 1	405	-	-	-	-	-
Stage 2	268	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 47	346	709	-	-	-
Mov Cap-2 Maneuver	~ 47	-	-	-	-	-
Stage 1	350	-	-	-	-	-
Stage 2	268	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	1002.5	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	709	-	47	346	-	-
HCM Lane V/C Ratio	0.046	-	3.353	0.11	-	-
HCM Control Delay (s)	10.3	$	1240.4	16.7	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	17.3	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	130.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	235	45	595	730	45	610
Future Vol, veh/h	235	45	595	730	45	610
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	145	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	255	49	647	793	49	663

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1805	1044	0	0	1440	0
Stage 1	1044	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 87	278	-	-	471	-
Stage 1	339	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 73	278	-	-	471	-
Mov Cap-2 Maneuver	~ 73	-	-	-	-	-
Stage 1	283	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	1047.6	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	73	278	471	-
HCM Lane V/C Ratio	-	-	3.499	0.176	0.104	-
HCM Control Delay (s)	-	-	$ 1244.2	20.7	13.5	0
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	26.4	0.6	0.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	115.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	10	235	30	15	10	165	415	10	5	450	120
Future Vol, veh/h	85	10	235	30	15	10	165	415	10	5	450	120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	11	255	33	16	11	179	451	11	5	489	130
Number of Lanes	1	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	18.2	15.4	152.9	141.4
HCM LOS	C	C	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	28%	0%	100%	0%	55%	1%
Vol Thru, %	72%	0%	0%	4%	27%	78%
Vol Right, %	0%	100%	0%	96%	18%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	580	10	85	245	55	575
LT Vol	165	0	85	0	30	5
Through Vol	415	0	0	10	15	450
RT Vol	0	10	0	235	10	120
Lane Flow Rate	630	11	92	266	60	625
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	1.257	0.019	0.214	0.531	0.154	1.221
Departure Headway (Hd)	7.556	6.688	9.29	8.066	10.534	7.49
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	485	538	389	450	343	488
Service Time	5.256	4.388	6.99	5.766	8.534	5.49
HCM Lane V/C Ratio	1.299	0.02	0.237	0.591	0.175	1.281
HCM Control Delay	155.4	9.5	14.5	19.5	15.4	141.4
HCM Lane LOS	F	A	B	C	C	F
HCM 95th-tile Q	24.5	0.1	0.8	3	0.5	22.9



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	20	10	100	5	55	5	690	140	160	790	10
Future Volume (veh/h)	30	20	10	100	5	55	5	690	140	160	790	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	22	11	109	5	60	5	750	152	174	859	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	139	316	226	23	95	267	785	159	278	1138	965
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.00	0.52	0.52	0.09	0.61	0.61
Sat Flow, veh/h	822	695	1585	788	117	477	1781	1509	306	1781	1870	1585
Grp Volume(v), veh/h	55	0	11	174	0	0	5	0	902	174	859	11
Grp Sat Flow(s),veh/h/ln	1517	0	1585	1382	0	0	1781	0	1815	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.5	7.9	0.0	0.0	0.1	0.0	40.3	3.3	28.3	0.2
Cycle Q Clear(g_c), s	2.3	0.0	0.5	10.2	0.0	0.0	0.1	0.0	40.3	3.3	28.3	0.2
Prop In Lane	0.60		1.00	0.63		0.34	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	370	0	316	344	0	0	267	0	944	278	1138	965
V/C Ratio(X)	0.15	0.00	0.03	0.51	0.00	0.00	0.02	0.00	0.96	0.63	0.75	0.01
Avail Cap(c_a), veh/h	495	0	448	465	0	0	596	0	944	448	1138	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	27.4	31.6	0.0	0.0	12.2	0.0	19.5	18.5	12.0	6.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	20.4	0.9	4.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.2	3.3	0.0	0.0	0.0	0.0	20.5	1.8	11.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	0.0	27.5	32.0	0.0	0.0	12.2	0.0	39.8	19.3	16.7	6.6
LnGrp LOS	C	A	C	C	A	A	B	A	D	B	B	A
Approach Vol, veh/h		66			174			907			1044	
Approach Delay, s/veh		28.1			32.0			39.7			17.0	
Approach LOS		C			C			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	50.2		22.9	4.3	57.7		22.9
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	16.0	29.0		24.0	16.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	15.3	42.3		4.3	2.1	30.3		12.2
Green Ext Time (p_c), s	0.2	0.0		0.2	0.0	0.0		0.5

Intersection Summary		
HCM 6th Ctrl Delay		27.9
HCM 6th LOS		C

Intersection	
Int Delay, s/veh	22.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	90	235	75	120	310	90
Future Vol, veh/h	90	235	75	120	310	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	255	82	130	337	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	212	0	-	0	598	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	451	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1358	-	-	-	465	900
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	642	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1358	-	-	-	426	900
Mov Cap-2 Maneuver	-	-	-	-	426	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	642	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	49.4
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1358	-	-	-	483
HCM Lane V/C Ratio	0.072	-	-	-	0.9
HCM Control Delay (s)	7.9	0	-	-	49.4
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.2	-	-	-	10.1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	25	10	195	345	10
Future Vol, veh/h	20	25	10	195	345	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	27	11	212	375	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	615	381	386	0	-	0
Stage 1	381	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	455	666	1172	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	805	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	450	666	1172	-	-	-
Mov Cap-2 Maneuver	450	-	-	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	805	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1172	-	450	666	-	-
HCM Lane V/C Ratio	0.009	-	0.048	0.041	-	-
HCM Control Delay (s)	8.1	0	13.4	10.6	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	20	5	215	355	10
Future Vol, veh/h	25	20	5	215	355	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	22	5	234	386	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	636	392	397	0	-	0
Stage 1	392	-	-	-	-	-
Stage 2	244	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	442	657	1162	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	797	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	440	657	1162	-	-	-
Mov Cap-2 Maneuver	440	-	-	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	797	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1162	-	516	-	-
HCM Lane V/C Ratio	0.005	-	0.095	-	-
HCM Control Delay (s)	8.1	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	80	15	230	285	35
Future Vol, veh/h	75	80	15	230	285	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	87	16	250	310	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	611	329	348	0	-	0
Stage 1	329	-	-	-	-	-
Stage 2	282	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	457	712	1211	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	766	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	450	712	1211	-	-	-
Mov Cap-2 Maneuver	450	-	-	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	766	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1211	-	556	-	-
HCM Lane V/C Ratio	0.013	-	0.303	-	-
HCM Control Delay (s)	8	0	14.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.3	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	100	25	5	295	300	35
Future Vol, veh/h	100	25	5	295	300	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	27	5	321	326	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	676	345	364	0	-	0
Stage 1	345	-	-	-	-	-
Stage 2	331	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	419	698	1195	-	-	-
Stage 1	717	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	417	698	1195	-	-	-
Mov Cap-2 Maneuver	417	-	-	-	-	-
Stage 1	713	-	-	-	-	-
Stage 2	728	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1195	-	417	698	-	-
HCM Lane V/C Ratio	0.005	-	0.261	0.039	-	-
HCM Control Delay (s)	8	0	16.6	10.4	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0	-	1	0.1	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	35	10	410	295	15
Future Vol, veh/h	45	35	10	410	295	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	38	11	446	321	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	797	329	337	0	-	0
Stage 1	329	-	-	-	-	-
Stage 2	468	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	356	712	1222	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	353	712	1222	-	-	-
Mov Cap-2 Maneuver	353	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	630	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1222	-	453	-	-
HCM Lane V/C Ratio	0.009	-	0.192	-	-
HCM Control Delay (s)	8	-	14.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	0	575	0	0	670
Future Vol, veh/h	30	0	575	0	0	670
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	0	625	0	0	728

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1353	-	0	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	-	-
Pot Cap-1 Maneuver	165	0	-	0	0	-
Stage 1	534	0	-	0	0	-
Stage 2	478	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	165	-	-	-	-	-
Mov Cap-2 Maneuver	165	-	-	-	-	-
Stage 1	534	-	-	-	-	-
Stage 2	478	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.1	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	165	-
HCM Lane V/C Ratio	-	0.198	-
HCM Control Delay (s)	-	32.1	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	0.7	-

APPENDIX C

LEVEL OF SERVICE CALCULATIONS

- Future Year 2021 PM

HCM 6th Signalized Intersection Summary
1: Honoapiilani Hwy & Kehalani Pkwy

05/22/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	95	170	15	125	85	200	505	25	110	640	270
Future Volume (veh/h)	125	95	170	15	125	85	200	505	25	110	640	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	103	185	16	136	92	217	549	0	120	696	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	334	283	237	193	163	327	869		405	805	
Arrive On Green	0.09	0.18	0.18	0.02	0.10	0.10	0.09	0.46	0.00	0.06	0.43	0.00
Sat Flow, veh/h	1594	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	136	103	185	16	136	92	217	549	0	120	696	0
Grp Sat Flow(s),veh/h/ln	1594	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.7	3.8	8.6	0.6	5.5	4.4	5.2	17.5	0.0	2.9	26.6	0.0
Cycle Q Clear(g_c), s	5.7	3.8	8.6	0.6	5.5	4.4	5.2	17.5	0.0	2.9	26.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	334	283	237	193	163	327	869		405	805	
V/C Ratio(X)	0.49	0.31	0.65	0.07	0.71	0.56	0.66	0.63		0.30	0.86	
Avail Cap(c_a), veh/h	428	569	483	543	569	483	613	925		751	925	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.5	28.2	30.1	30.7	34.2	33.7	16.3	16.0	0.0	12.6	20.4	0.0
Incr Delay (d2), s/veh	0.5	0.2	1.0	0.0	1.8	1.1	0.9	2.0	0.0	0.2	9.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	1.7	3.3	0.3	2.6	1.7	1.8	7.0	0.0	1.0	12.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	28.4	31.1	30.7	36.0	34.8	17.2	18.0	0.0	12.8	29.5	0.0
LnGrp LOS	C	C	C	C	D	C	B	B		B	C	
Approach Vol, veh/h		424			244			766	A		816	A
Approach Delay, s/veh		29.1			35.2			17.7			27.1	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	42.6	6.5	20.1	12.4	39.9	12.4	14.1
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	20.0	39.0	15.0	24.0	20.0	39.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	4.9	19.5	2.6	10.6	7.2	28.6	7.7	7.5
Green Ext Time (p_c), s	0.1	6.0	0.0	0.6	0.2	5.3	0.1	0.6

Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	90	35	475	140	270	50	460	410	270	545	40
Future Volume (veh/h)	15	90	35	475	140	270	50	460	410	270	545	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2067	2067	2067	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	98	38	516	152	293	54	500	0	293	592	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	147	181	580	592	708	239	564		359	747	657
Arrive On Green	0.01	0.07	0.07	0.26	0.32	0.32	0.03	0.30	0.00	0.13	0.40	0.40
Sat Flow, veh/h	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	16	98	38	516	152	293	54	500	0	293	592	43
Grp Sat Flow(s),veh/h/ln	1968	2067	1751	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.6	3.9	1.7	22.0	5.1	10.6	1.8	21.5	0.0	9.1	23.5	1.4
Cycle Q Clear(g_c), s	0.6	3.9	1.7	22.0	5.1	10.6	1.8	21.5	0.0	9.1	23.5	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	189	147	181	580	592	708	239	564		359	747	657
V/C Ratio(X)	0.08	0.67	0.21	0.89	0.26	0.41	0.23	0.89		0.82	0.79	0.07
Avail Cap(c_a), veh/h	392	220	243	580	592	708	308	620		359	747	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	38.3	34.7	25.1	21.5	15.8	20.8	28.1	0.0	19.2	22.3	14.9
Incr Delay (d2), s/veh	0.2	1.9	0.2	15.6	0.1	0.1	0.2	15.3	0.0	12.8	6.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	0.7	11.5	2.2	3.7	0.7	11.5	0.0	4.7	10.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.8	40.2	34.9	40.7	21.5	16.0	21.0	43.4	0.0	31.9	28.9	15.0
LnGrp LOS	D	D	C	D	C	B	C	D		C	C	B
Approach Vol, veh/h		152			961			554	A		928	
Approach Delay, s/veh		38.4			30.1			41.2			29.2	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	31.5	26.0	12.0	6.7	39.7	5.3	32.8
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	11.0	28.0	22.0	9.0	6.0	33.0	10.0	21.0
Max Q Clear Time (g_c+I1), s	11.1	23.5	24.0	5.9	3.8	25.5	2.6	12.6
Green Ext Time (p_c), s	0.0	1.9	0.0	0.1	0.0	3.7	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	13.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	120	590	25	25	670	90	15	5	15	45	5	155
Future Vol, veh/h	120	590	25	25	670	90	15	5	15	45	5	155
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	145	-	-	50	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	130	641	27	27	728	98	16	5	16	49	5	168

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	826	0	0	668	0	0	1833	1795	655	1756	1759	777
Stage 1	-	-	-	-	-	-	915	915	-	831	831	-
Stage 2	-	-	-	-	-	-	918	880	-	925	928	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	805	-	-	922	-	-	59	80	466	66	85	397
Stage 1	-	-	-	-	-	-	327	352	-	364	384	-
Stage 2	-	-	-	-	-	-	326	365	-	323	347	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	805	-	-	922	-	-	27	65	466	51	69	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	27	65	-	51	69	-
Stage 1	-	-	-	-	-	-	274	295	-	305	373	-
Stage 2	-	-	-	-	-	-	180	354	-	257	291	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	0.3	145.2	80.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	32	466	805	-	-	922	-	-	52	397
HCM Lane V/C Ratio	0.679	0.035	0.162	-	-	0.029	-	-	1.045	0.424
HCM Control Delay (s)	244.3	13	10.3	-	-	9	-	-	265.1	20.6
HCM Lane LOS	F	B	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	2.3	0.1	0.6	-	-	0.1	-	-	4.7	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	275	85	125	425	290	90	225	75	330	295	290
Future Volume (veh/h)	290	275	85	125	425	290	90	225	75	330	295	290
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	315	299	83	136	462	70	98	245	69	359	321	285
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	485	135	355	514	436	159	381	107	442	348	309
Arrive On Green	0.14	0.34	0.34	0.07	0.27	0.27	0.03	0.27	0.27	0.14	0.38	0.38
Sat Flow, veh/h	1781	1409	391	1781	1870	1585	1781	1404	395	1781	913	811
Grp Volume(v), veh/h	315	0	382	136	462	70	98	0	314	359	0	606
Grp Sat Flow(s),veh/h/ln	1781	0	1800	1781	1870	1585	1781	0	1799	1781	0	1724
Q Serve(g_s), s	14.4	0.0	20.8	6.4	28.1	4.0	4.0	0.0	18.2	16.9	0.0	39.5
Cycle Q Clear(g_c), s	14.4	0.0	20.8	6.4	28.1	4.0	4.0	0.0	18.2	16.9	0.0	39.5
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.22	1.00		0.47
Lane Grp Cap(c), veh/h	345	0	620	355	514	436	159	0	488	442	0	658
V/C Ratio(X)	0.91	0.00	0.62	0.38	0.90	0.16	0.62	0.00	0.64	0.81	0.00	0.92
Avail Cap(c_a), veh/h	367	0	732	380	634	537	159	0	610	442	0	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	32.2	28.1	41.2	32.5	37.0	0.0	38.0	26.4	0.0	34.8
Incr Delay (d2), s/veh	25.5	0.0	1.2	0.7	13.7	0.2	7.0	0.0	1.6	10.9	0.0	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	9.3	2.8	14.9	1.6	1.2	0.0	8.3	8.5	0.0	19.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	0.0	33.3	28.8	54.9	32.6	44.0	0.0	39.5	37.3	0.0	49.7
LnGrp LOS	D	A	C	C	D	C	D	A	D	D	A	D
Approach Vol, veh/h		697			668			412			965	
Approach Delay, s/veh		42.4			47.3			40.6			45.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	38.0	12.3	46.6	8.0	51.0	20.6	38.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	17.0	40.0	10.0	48.0	4.0	53.0	18.0	40.0
Max Q Clear Time (g_c+I1), s	18.9	20.2	8.4	22.8	6.0	41.5	16.4	30.1
Green Ext Time (p_c), s	0.0	1.9	0.1	2.6	0.0	3.4	0.2	2.4

Intersection Summary	
HCM 6th Ctrl Delay	44.3
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	22.4
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	717	548	327	717
Demand Flow Rate, veh/h	731	559	333	731
Vehicles Circulating, veh/h	415	609	758	448
Vehicles Exiting, veh/h	764	482	388	720
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	22.8	22.3	14.5	25.8
Approach LOS	C	C	B	D

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	731	559	333	731
Cap Entry Lane, veh/h	904	741	637	874
Entry HV Adj Factor	0.980	0.980	0.981	0.981
Flow Entry, veh/h	717	548	327	717
Cap Entry, veh/h	886	726	625	857
V/C Ratio	0.809	0.754	0.523	0.837
Control Delay, s/veh	22.8	22.3	14.5	25.8
LOS	C	C	B	D
95th %tile Queue, veh	9	7	3	10

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	35	45	870	850	25
Future Vol, veh/h	30	35	45	870	850	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	38	49	946	924	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1982	938	951	0	-	0
Stage 1	938	-	-	-	-	-
Stage 2	1044	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	68	321	722	-	-	-
Stage 1	381	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	58	321	722	-	-	-
Mov Cap-2 Maneuver	58	-	-	-	-	-
Stage 1	327	-	-	-	-	-
Stage 2	339	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	68.6	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	722	-	58	321	-	-
HCM Lane V/C Ratio	0.068	-	0.562	0.119	-	-
HCM Control Delay (s)	10.3	0	128	17.7	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	2.3	0.4	-	-

Intersection	
Int Delay, s/veh	39.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	105	20	30	920	885	155
Future Vol, veh/h	105	20	30	920	885	155
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	22	33	1000	962	168

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2112	1046	1130	0	-	0
Stage 1	1046	-	-	-	-	-
Stage 2	1066	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 56	277	618	-	-	-
Stage 1	338	-	-	-	-	-
Stage 2	331	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 49	277	618	-	-	-
Mov Cap-2 Maneuver	~ 49	-	-	-	-	-
Stage 1	297	-	-	-	-	-
Stage 2	331	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s$	662.9	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	618	-	49	277	-	-
HCM Lane V/C Ratio	0.053	-	2.329	0.078	-	-
HCM Control Delay (s)	11.1	0$	785.5	19.1	-	-
HCM Lane LOS	B	A	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	11.8	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	214.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	285	45	535	305	70	790
Future Vol, veh/h	285	45	535	305	70	790
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	145	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	310	49	582	332	76	859

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1759	748	0	0	914	0
Stage 1	748	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 93	412	-	-	746	-
Stage 1	468	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 75	412	-	-	746	-
Mov Cap-2 Maneuver	~ 75	-	-	-	-	-
Stage 1	377	-	-	-	-	-
Stage 2	352	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	1316.8	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	75	412	746	-
HCM Lane V/C Ratio	-	-	4.13	0.119	0.102	-
HCM Control Delay (s)	-	-	$ 1522.4	14.9	10.4	0
HCM Lane LOS	-	-	F	B	B	A
HCM 95th %tile Q(veh)	-	-	32.9	0.4	0.3	-

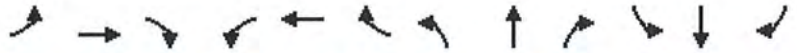
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	92
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	10	270	10	0	5	90	470	20	10	515	35
Future Vol, veh/h	25	10	270	10	0	5	90	470	20	10	515	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	11	293	11	0	5	98	511	22	11	560	38
Number of Lanes	1	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	20	13.5	110.4	114.3
HCM LOS	C	B	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	0%	100%	0%	67%	2%
Vol Thru, %	84%	0%	0%	4%	0%	92%
Vol Right, %	0%	100%	0%	96%	33%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	560	20	25	280	15	560
LT Vol	90	0	25	0	10	10
Through Vol	470	0	0	10	0	515
RT Vol	0	20	0	270	5	35
Lane Flow Rate	609	22	27	304	16	609
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	1.153	0.036	0.062	0.594	0.042	1.153
Departure Headway (Hd)	7.097	6.295	8.787	7.565	10.049	7.107
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	517	572	410	481	359	517
Service Time	4.797	3.995	6.487	5.265	8.049	5.107
HCM Lane V/C Ratio	1.178	0.038	0.066	0.632	0.045	1.178
HCM Control Delay	114	9.2	12.1	20.7	13.5	114.3
HCM Lane LOS	F	A	B	C	B	F
HCM 95th-tile Q	20.4	0.1	0.2	3.8	0.1	20.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	15	10	135	20	90	5	800	135	65	860	30
Future Volume (veh/h)	15	15	10	135	20	90	5	800	135	65	860	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	16	11	147	22	98	5	870	147	71	935	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	162	330	207	28	108	243	922	156	215	1215	1029
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.00	0.59	0.59	0.06	0.65	0.65
Sat Flow, veh/h	624	780	1585	763	135	521	1781	1559	263	1781	1870	1585
Grp Volume(v), veh/h	32	0	11	267	0	0	5	0	1017	71	935	33
Grp Sat Flow(s),veh/h/ln	1404	0	1585	1419	0	0	1781	0	1823	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.6	19.7	0.0	0.0	0.1	0.0	59.5	1.6	40.4	0.9
Cycle Q Clear(g_c), s	1.6	0.0	0.6	21.3	0.0	0.0	0.1	0.0	59.5	1.6	40.4	0.9
Prop In Lane	0.50		1.00	0.55		0.37	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	339	0	330	344	0	0	243	0	1078	215	1215	1029
V/C Ratio(X)	0.09	0.00	0.03	0.78	0.00	0.00	0.02	0.00	0.94	0.33	0.77	0.03
Avail Cap(c_a), veh/h	431	0	426	434	0	0	282	0	1106	228	1216	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	36.4	45.1	0.0	0.0	14.4	0.0	21.8	25.3	14.2	7.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	15.8	0.3	3.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.3	8.0	0.0	0.0	0.1	0.0	28.2	1.2	16.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	0.0	36.5	50.2	0.0	0.0	14.5	0.0	37.6	25.7	17.8	7.3
LnGrp LOS	D	A	D	D	A	A	B	A	D	C	B	A
Approach Vol, veh/h		43			267			1022			1039	
Approach Delay, s/veh		36.8			50.2			37.5			18.0	
Approach LOS		D			D			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	74.2		30.0	4.4	80.9		30.0				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	70.0		31.0	3.0	75.0		31.0				
Max Q Clear Time (g_c+I1), s	13.6	61.5		3.6	2.1	42.4		23.3				
Green Ext Time (p_c), s	0.0	6.7		0.1	0.0	17.2		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	11.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	105	105	150	260	215	90
Future Vol, veh/h	105	105	150	260	215	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	114	163	283	234	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	446	0	-	0	647	305
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	342	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1114	-	-	-	436	735
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	719	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1114	-	-	-	388	735
Mov Cap-2 Maneuver	-	-	-	-	388	-
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	719	-

Approach	EB	WB	SB
HCM Control Delay, s	4.3	0	32.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1114	-	-	-	451
HCM Lane V/C Ratio	0.102	-	-	-	0.735
HCM Control Delay (s)	8.6	0	-	-	32.1
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.3	-	-	-	6

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	10	20	330	280	20
Future Vol, veh/h	15	10	20	330	280	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	11	22	359	304	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	718	315	326	0	-	0
Stage 1	315	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	396	725	1234	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	387	725	1234	-	-	-
Mov Cap-2 Maneuver	387	-	-	-	-	-
Stage 1	724	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1234	-	387	725	-	-
HCM Lane V/C Ratio	0.018	-	0.042	0.015	-	-
HCM Control Delay (s)	8	0	14.7	10	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	15	25	330	290	20
Future Vol, veh/h	10	15	25	330	290	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	16	27	359	315	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	739	326	337	0	-	0
Stage 1	326	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	385	715	1222	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	374	715	1222	-	-	-
Mov Cap-2 Maneuver	374	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	668	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1222	-	524	-	-
HCM Lane V/C Ratio	0.022	-	0.052	-	-
HCM Control Delay (s)	8	0	12.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	40	40	300	270	80
Future Vol, veh/h	50	40	40	300	270	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	43	43	326	293	87

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	749	337	380	0	-	0
Stage 1	337	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	379	705	1178	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	362	705	1178	-	-	-
Mov Cap-2 Maneuver	362	-	-	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	669	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.9	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1178	-	462	-	-
HCM Lane V/C Ratio	0.037	-	0.212	-	-
HCM Control Delay (s)	8.2	0	14.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	10	15	335	340	75
Future Vol, veh/h	60	10	15	335	340	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	11	16	364	370	82

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	807	411	452	0	-	0
Stage 1	411	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	351	641	1109	-	-	-
Stage 1	669	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	345	641	1109	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	657	-	-	-	-	-
Stage 2	680	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.9	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1109	-	345	641	-	-
HCM Lane V/C Ratio	0.015	-	0.189	0.017	-	-
HCM Control Delay (s)	8.3	0	17.9	10.7	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	20	30	370	420	45
Future Vol, veh/h	25	20	30	370	420	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	22	33	402	457	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	950	482	506	0	-	0
Stage 1	482	-	-	-	-	-
Stage 2	468	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	289	584	1059	-	-	-
Stage 1	621	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	280	584	1059	-	-	-
Mov Cap-2 Maneuver	280	-	-	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	630	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.4	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1059	-	364	-	-
HCM Lane V/C Ratio	0.031	-	0.134	-	-
HCM Control Delay (s)	8.5	-	16.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	0	560	0	0	765
Future Vol, veh/h	10	0	560	0	0	765
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	0	609	0	0	832

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1441	-	0	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	-	-
Pot Cap-1 Maneuver	146	0	-	0	0	-
Stage 1	543	0	-	0	0	-
Stage 2	427	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	146	-	-	-	-	-
Mov Cap-2 Maneuver	146	-	-	-	-	-
Stage 1	543	-	-	-	-	-
Stage 2	427	-	-	-	-	-

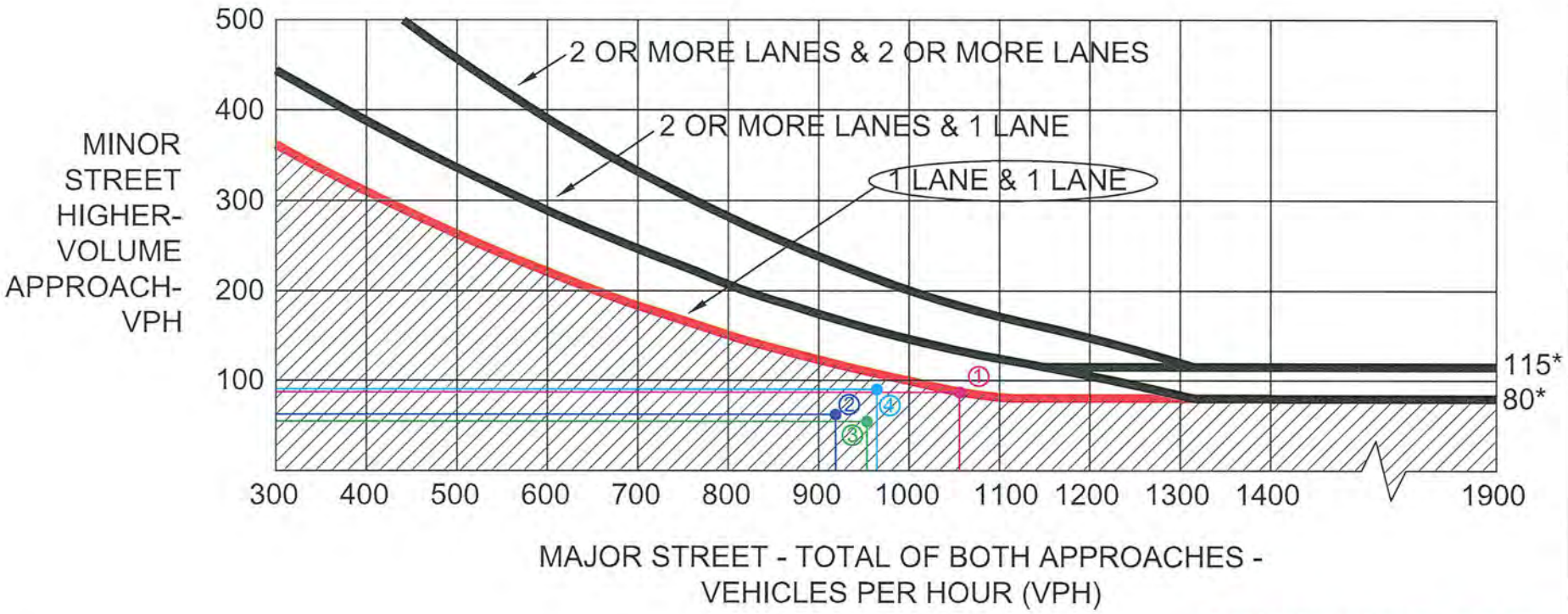
Approach	WB	NB	SB
HCM Control Delay, s	31.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	146	-
HCM Lane V/C Ratio	-	0.074	-
HCM Control Delay (s)	-	31.6	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	0.2	-

APPENDIX D

TRAFFIC SIGNAL WARRANT

Warrant 2, Four-Hour Vehicular Volume

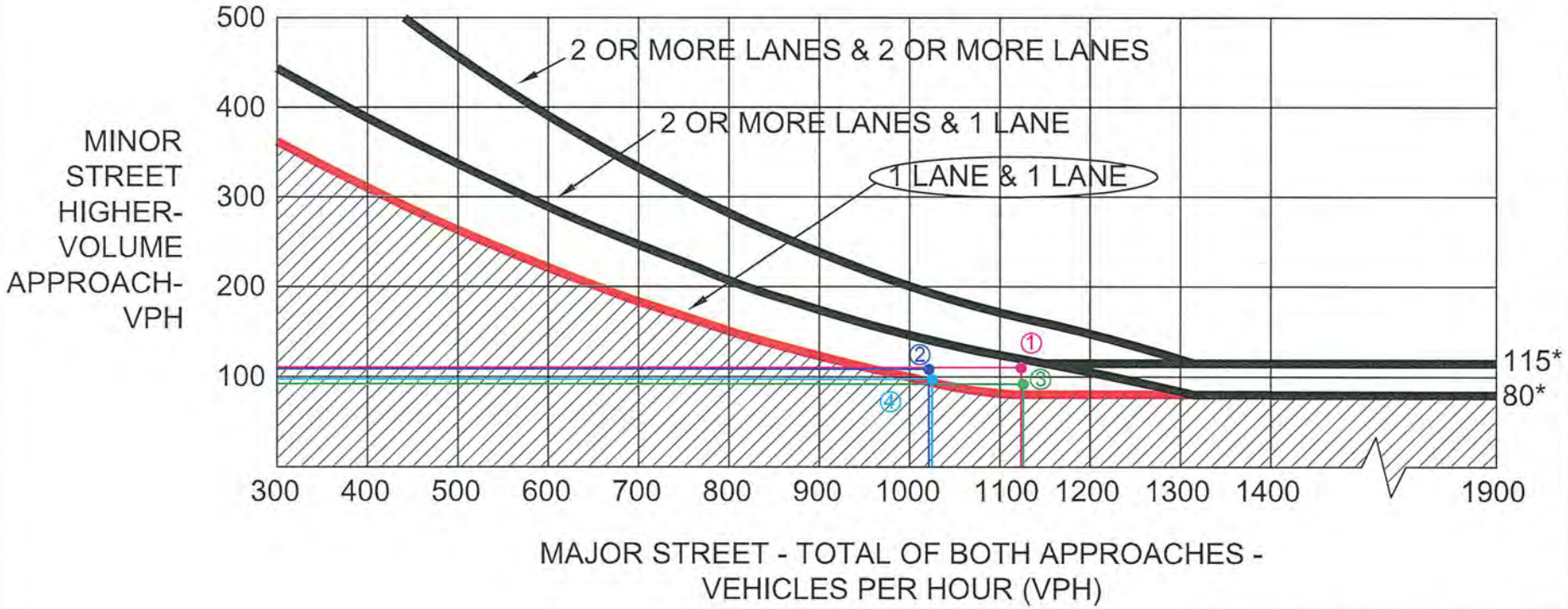


① (7:00 AM to 8:00 AM), (1048, 81)
② (2:15 PM to 3:15 PM), (917, 64)
③ (3:15 PM to 4:15 PM), (946, 50)
④ (4:15 PM to 5:15 PM), (965, 86)

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

WAILUKU APARTMENTS TIAR	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII **EXISTING 2017 CONDITIONS – FOUR HOUR TRAFFIC SIGNAL WARRANT FOR WAIALE ROAD/KAOHU STREET INTERSECTION**	FIGURE **D1**

Warrant 2, Four-Hour Vehicular Volume

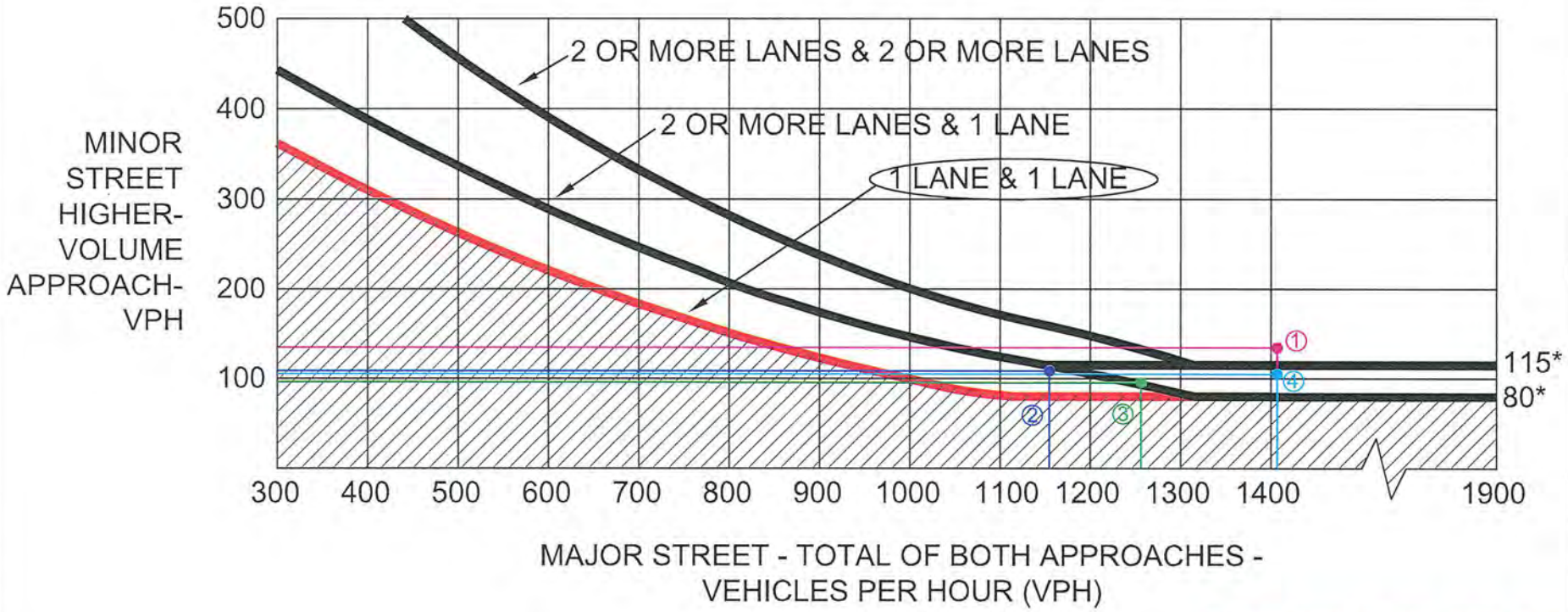


① (7:00 AM to 8:00 AM), (1124, 112)
② (1:30 PM to 2:30 PM), (1024, 110)
③ (3:30 PM to 4:30 PM), (1125, 90)
④ (4:30 PM to 5:30 PM), (1030, 95)

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

WAILUKU APARTMENTS TIAR	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII **BASE YEAR 2021 CONDITIONS - FOUR HOUR TRAFFIC SIGNAL WARRANT FOR WAIALE ROAD/KAOHU STREET INTERSECTION**	FIGURE D2

Warrant 2, Four-Hour Vehicular Volume

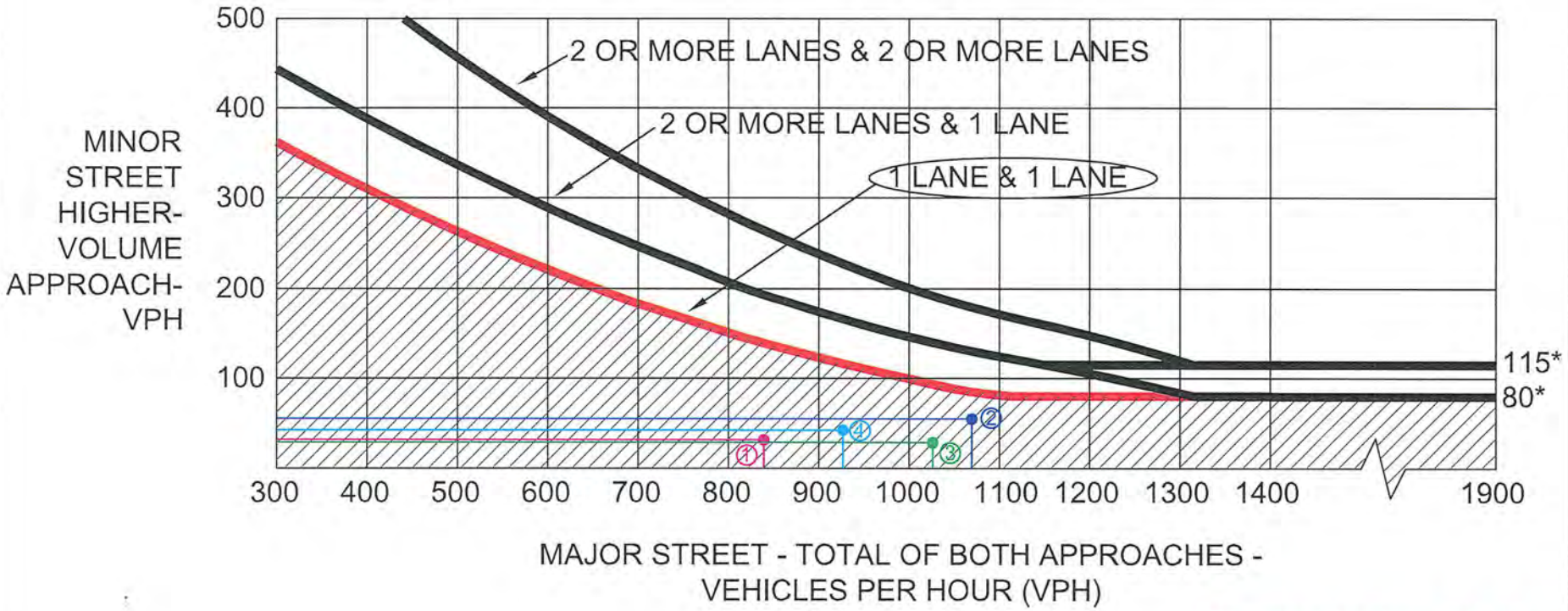


① (6:45 AM to 7:45 AM), (1405, 132)
② (7:45 PM to 8:45 PM), (1163, 114)
③ (3:15 PM to 4:15 PM), (1267, 89)
④ (4:15 PM to 5:15 PM), (1405, 104)

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

WAILUKU APARTMENTS TIAR	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII **EXISTING 2017 CONDITIONS – FOUR HOUR TRAFFIC SIGNAL WARRANT FOR WAIALE ROAD/OLOMEA STREET INTERSECTION**	FIGURE **D3**

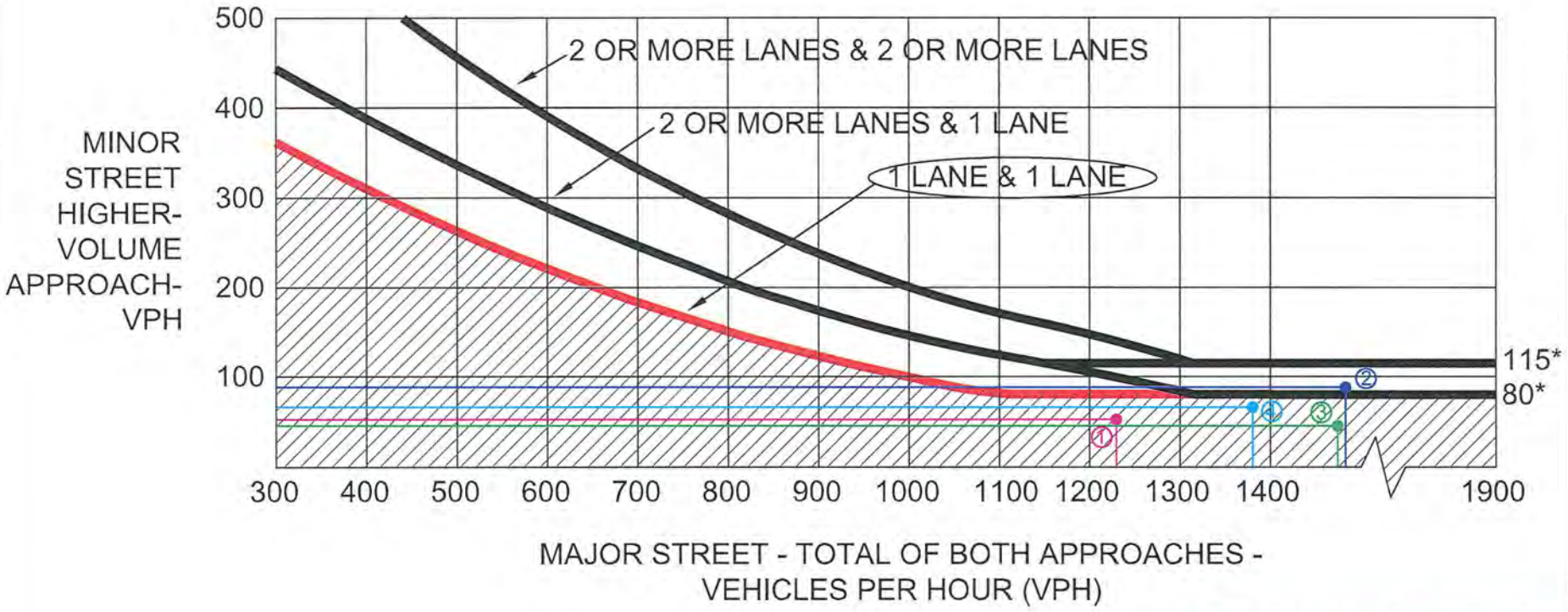
Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

WAILUKU APARTMENTS TIAR	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII **EXISTING 2017 CONDITIONS – FOUR HOUR TRAFFIC SIGNAL WARRANT FOR WAIALE ROAD/KEHALANI VILLAGE CENTER DRIVEWAY**	FIGURE D4

Warrant 2, Four-Hour Vehicular Volume



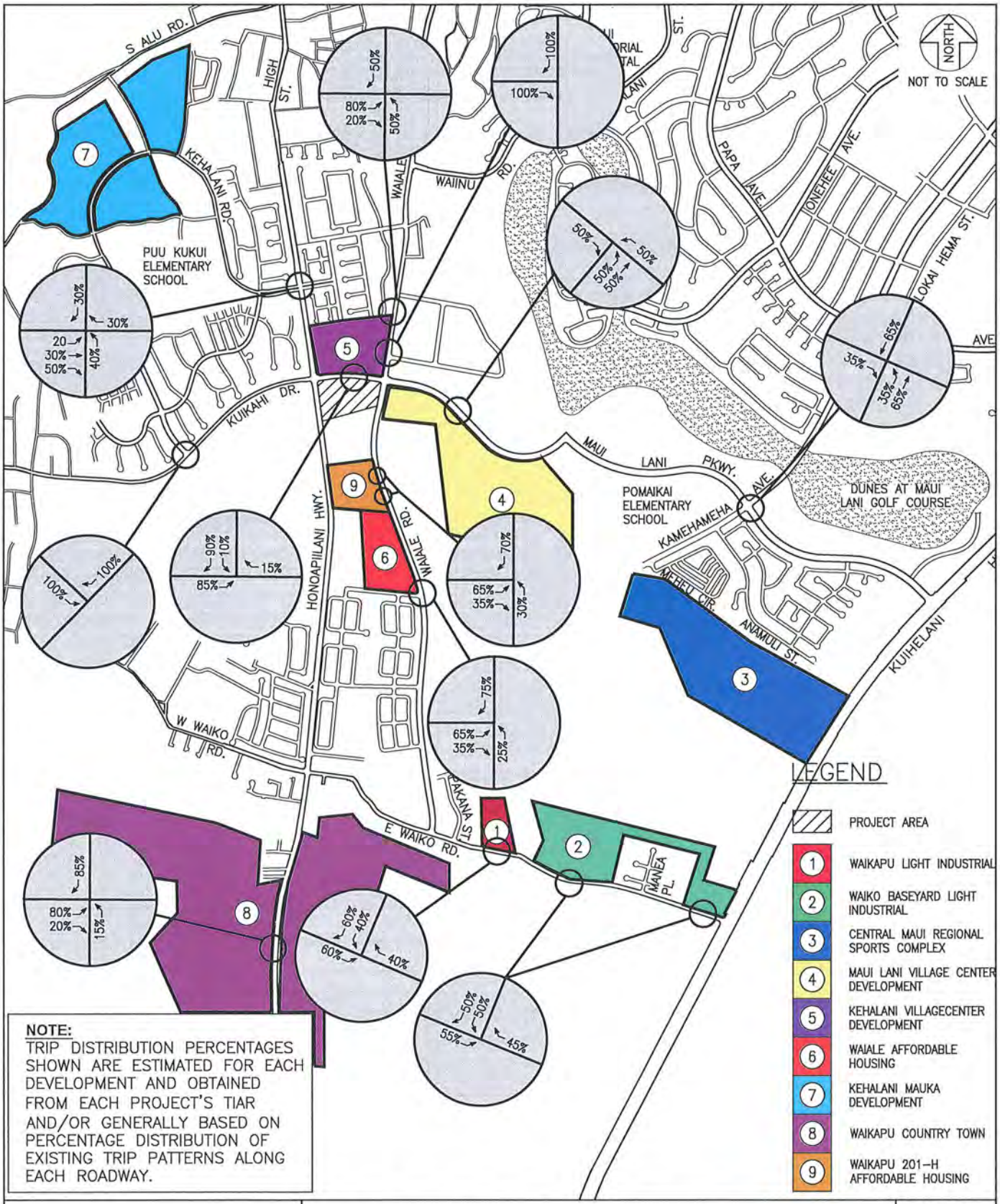
① (1:45 PM to 2:45 PM), (1237, 50)
② (2:45 PM to 3:45 PM), (1567, 82)
③ (3:45 PM to 4:45 PM), (1526, 44)
④ (4:45 PM to 5:45 PM), (1388, 66)

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

WAILUKU APARTMENTS TIAR	AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII **FY 2020 CONDITIONS – FOUR HOUR TRAFFIC SIGNAL WARRANT FOR WAIALE ROAD/KEHALANI VILLAGE CENTER DRIVEWAY**	FIGURE **D5**

APPENDIX E

BACKGROUND PROJECT TRIPS



NOTE:
TRIP DISTRIBUTION PERCENTAGES SHOWN ARE ESTIMATED FOR EACH DEVELOPMENT AND OBTAINED FROM EACH PROJECT'S TIAR AND/OR GENERALLY BASED ON PERCENTAGE DISTRIBUTION OF EXISTING TRIP PATTERNS ALONG EACH ROADWAY.

WAILUKU APARTMENTS

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
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FIGURE E

DISTRIBUTION OF BACKGROUND DEVELOPMENT TRIPS IN PROJECT VICINITY

APPENDIX

SUMMARY TABLE OF REQUESTED EXEMPTIONS

APPENDIX I: SUMMARY OF EXEMPTIONS

SUMMARY OF EXEMPTIONS				
Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption and Estimated Value Where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
1. Requirement for General plan and Community Plan land use consistency	Title 2, Maui County Code, Administration and Personnel	**MCC 2.80B General Plans and Community Plans.** An exemption from Chapter 2.80B, MCC, General Plan and Community Plans, to permit the project to proceed without obtaining a community plan amendment. Section 2.80B.070 sets out the requirements for and establishes the nine (9) community plans for the County. The subject property is designated "Future Growth Reserve" in the Wailuku-Kahului Community Plan Map. The appropriate land use designation for the proposed project is "Multi-Family". As such, an exemption from the requirements for a Community Plan Amendment (CPA) is sought in order to expedite the development of the affordable rental units and meet affordable rental target thresholds. equipment)	Maui County Dept. of Planning expressed no objection to this proposed exemption.	This exemption would expedite the delivery of affordable workforce housing. The current site is designated as "Urban Growth" in the Maui Island Plan.
2. Requirement for planting of street trees	Title 12, Maui County Code: Streets, Sidewalks, and Public Places Section 12.24A.070 - Planting of Street Trees Maui County Planting Plan Chapter 2	**MCC 12.24A Landscape Planting and Beautification.** An exemption from the requirement to allow the required number, species and location of street trees along Honoapi'ilani Highway, Wa'iale Road and Ku'ikahi Drive. Landscaping to be provided in accordance with the Conceptual Landscape Plan prepared by Landscape Architect Russell Y. Gushi. Refer to **Figure 3** – Conceptual Site Plan Estimated Value: $9,600	Maui County Dept. of Parks and Recreation (DPR) and Dept. of Public Works (DPW). DPR expressed no concerns. DPW noted that trees along the project frontage may pose a maintenance issue.	This exemption allows the development the flexibility to create an attractive streetscape in a cost-effective manner. It also creates flexibility in location of trees.
3. Requirement for payment of wastewater assessment fees	Title 14, Maui County Code: Wastewater Assessment Fees for the Wailuku/Kahului Wastewater	**MCC 14.35 Wastewater Assessment Fees for Facility Expansion for the Wailuku/Kahului Wastewater Treatment System.** Exemption to allow the project to receive its building permits without the need to pay wastewater assessment fees for the project in its entirety. Although Section 14.35.080, Exemptions, exempts County housing projects and facilities from the provisions of this chapter, the project is privately funded with 60% of the units	Maui County Department of Environmental Management in their September 15, 2017 comment letter stated that the project would not be subject to wastewater assessment fees. However, this exemption has been included to ensure clarification	An exemption from the requirements to pay the wastewater assessment fee for the Wailuku/Kahului Wastewater Treatment System will advance the affordability objectives of the project.

APPENDIX I: SUMMARY OF EXEMPTIONS

SUMMARY OF EXEMPTIONS (cont'd.)				
Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
	Treatment System	falling within the affordability parameters of Chapter 2.96. This exemption clarifies that the applicant is seeking a waiver from the need to pay wastewater assessment fees for the entire 324 units of the project. Estimated Value: $377,460	that wastewater assessment fees are waived.	
4. Requirement for payment of permit and inspection fees	Title 16, Maui County Code: Buildings and Construction Section 16.04C, 16.18B, 16.2B, 16.26B	**MCC Title 16 Building and Construction**. Exemptions from MCC Chapters: • 16.04C, Fire Code, • 16.18B, Electrical Code, • 16.20B, Plumbing Code, and • 16.26B, Building Code, to exempt the project from fire, electrical, plumbing, and building permit, plan review, and inspection fees. Estimated Value: • Fire Code: $61,110 • Electrical Code: $58,816 • Plumbing Code: $100,737 • Building Code: $611,020[1]	Maui County Dept. of Fire & Public Safety and Dept. of Public Works The Dept. of Fire and Public Safety noted that the subject fees are collected as a bundle. Accordingly, Fire Code fees will be exempted if exemptions to electrical, plumbing, and building fees are approved. The Dept. of Public Works had no concerns.	These exemptions provide savings to ensure the project is financially feasible. The project intends to meet all inspection and code requirements.

[1] Includes review and permit fee based on $70 million estimated cost to construct the project

APPENDIX I: SUMMARY OF EXEMPTIONS

SUMMARY OF EXEMPTIONS (cont'd.)				
Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
5. Requirements for offsite public street frontage improvements: pavement widening; installing curbs, gutters and sidewalks.	Title 16, Maui County Code: Buildings and Construction Section 16.26B.3600 - Chapter 36: Improvements to Public Streets	**MCC 16.26B Building Code.** Section 16.26B.3600 Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemption will be sought for construction of curbs and gutters along Kuʻikahi Drive, Waiʻale Road, and Honoapiʻilani Highway. *Reference **Appendix B**, Preliminary Engineering Report, Figure 2-1 (Proposed Access Improvements), Figure 2-2 (Typical Street Sections)*	Maui County Dept. of Public Works commented that the Department generally does not support this exemption request, but stated that this does not preclude the applicant from seeking the exemption from the County Council.	This exemption will allow the development to avoid the expense of constructing widened pavements, curbs and sidewalks along Kuʻikahi Drive, Waʻiale Road, and Honoapiilani Highway in non-essential locations where such improvements would offer little benefit to project residents. The project intends to install an at-grade sidewalk and bike lane along Kuʻikahi Drive and Waʻiale Road.
6. Requirement for offsite public street frontage improvements: undergrounding overhead utility lines	Title 16, Maui County Code: Buildings and Construction Section 16.26B.3600 - Chapter 36: Improvements to Public Streets	**MCC 16.26B Building Code.** Section 16.26B.3600 Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemptions will be sought to this section pertaining to the undergrounding of overhead utility lines. Estimated Value: $314,200	Maui County Dept. of Public Works commented that the Department generally does not support this exemption request, but stated that this does not preclude the applicant from seeking the exemption from the County Council.	This exemption will enable the development to proceed without the need to pay for the relocation of existing overhead utility lines along Waʻiale Road underground, as this is a non-essential improvement that will not benefit project residents.

APPENDIX I: SUMMARY OF EXEMPTIONS

SUMMARY OF EXEMPTIONS (cont'd.)				
Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
7. Requirement for offsite public street frontage improvements: installation of street lights on public streets	Title 16, Maui County Code: Buildings and Construction Section 16.26B.3600 - Chapter 36: Improvements to Public Streets	**MCC 16.26B Building Code.** Section 16.26B.3600 Improvements to Public Streets, allows the Director of Public Works to require certain improvements, such as undergrounding of overhead utility lines, bicycle lanes, curbs and gutters, sidewalks and street lighting improvements when public streets are adjacent to the property on which any new structure(s) will be situated. Exemptions will be sought to this section pertaining to street lighting along Ku'ikahi Drive, Wa'iale Road and Honoapiilani Highway. *Reference **Appendix A**– Diagram of On-Site Lighting Locations & Specifications.* Estimated Value: $84,300	Maui County Dept. of Public Works commented that the Department generally does not support this exemption request, but stated that this does not preclude the applicant from seeking the exemption from the County Council.	Developer intends to provide similar lighting conditions that exist adjacent to and along Honoapilani Highway, Kuʻikahi Drive and Waʻiale Road. Improved intersections with lighting occur only at roadway intersections in the immediate community surrounding the Project. The two new project driveways will be lighted from on-site area light poles at the intersection with the public rights-of-way. These area lights will provide lumens similar to the existing adjacent intersections at the ground plane. The public sidewalk proposed between the Project East Entrance and the intersection of Kuʻikahi and Waʻiale Road will also be lighted from on-site area light poles.
8. Requirement for payment of park assessment fee	Maui County Code Chapter 18.16.320 (I)(5) – Park Assessment Fee	**MCC18.16.320 Parks and Playgrounds.** Pursuant to Section 18.16.320(I)(5) Park Assessment Fees are exempt for workforce housing projects. As sixty percent of the proposed project involves workforce housing units, this portion of the project is exempt from payment of the parks and playgrounds assessment fee. Nevertheless, the proposed project also includes four (4) small parks/playgrounds improvements totaling approximately 16,823 sq. ft. in area. As such, an exemption for the parks and playground assessment fee will be sought for the market portion of the project (i.e. 40 percent of the total units) since provisions for parks and playgrounds will be provided onsite. Estimated Value: $1,782,000	Maui County Dept. of Parks and Recreation expressed no concern with this request.	This exemption will allow the development to reduce its costs to indirectly subsidize 195 affordable workforce rental units. The area also includes five county parks for residents within a 2-mile radius. The project also includes four children play areas that act as internal parks within the project totaling approximately 16,823sf of area.

APPENDIX I: SUMMARY OF EXEMPTIONS

SUMMARY OF EXEMPTIONS (cont'd.)				
Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
9. Requirement to obtain a change of zoning and community plan amendment	Title 18, Maui County Code Section 18.04.030, Section 18.16.020	**MCC 18.04 General Provisions and 18.16.020 Compliance.** An exemption from Section 18.04.030, MCC, Administration, and related land use consistency and conformity requirements of Title 18, to exempt the project from obtaining a change in zoning and/or community plan amendment to enable subdivision approval. An exemption from MCC 18.16.020 to exempt the project from General Plan conformity requirements.	Maui County Dept. of Planning Department expressed no concerns or objections.	This exemption would expedite the delivery of affordable workforce housing. The current site is designated as "Urban Growth" in the Maui Island Plan area.
10. Requirement for offsite public street frontage improvements curbs, gutters, sidewalks, and bike connectivity	Title 18, Maui County Code Sections 18.20.040, 18.20.070, 18.20.080	**MCC 18.20 Subdivision Improvements.** Exemption from Sections 18.20.040, 18.20.070 and 18.20.080, MCC, as they relate to the urban standards for curbs, gutters, and sidewalks shall be granted for the portions of the Project adjacent to Waʻiale Road and Kuʻikahi Drive. Instead the project will provide an at-grade sidewalk and bike path along Waʻiale Road and Kuʻikahi Drive with a raised asphalt curb painted white to delineate the pedestrian safety zone. *Reference **Appendix B**, Preliminary Engineering Report, Figure 2-1 (Proposed Access Improvements), Figure 2-2 (Typical Street Sections)* Estimated Value: $167,850	Maui County Dept. of Public Works commented that the Department generally does not support this exemption request, but stated that this does not preclude the applicant from seeking the exemption from the County Council.	Figure 2-2 of **Appendix "B"** depicts a painted asphalt curb between the main pavement and the pedestrian sidewalk on Waʻiale Road and Kuʻikahi Drive. Note that the actual physical distance between the proposed sidewalk and the outer edge of the southbound vehicle lane on Waʻiale Road will be 9 feet or more, while the distance between the edge of the travel way and sidewalk on Kuʻikahi Drive is 10 feet. These horizontal separation distances provide for pedestrian safety.

APPENDIX I: SUMMARY OF EXEMPTIONS

SUMMARY OF EXEMPTIONS (cont'd.)				
Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
11. Requirement to obtain a change of zoning and to allow the use of the A-2, Apartment District zoning standards.	Title 19, Maui County Code: Zoning Section 19.12, Apartment District	**MCC 19.12, Zoning.** An exemption from Chapter 19, MCC, is sought to permit the development and use of the parcel for multi-family residential use, recreational uses and structures, and accessory uses according to the permitted uses, accessory uses and buildings, and development standards of the A-2, Apartment District pursuant to the provisions set forth in Chapter 19.12, Apartment District. In addition, the Applicant is seeking an exemption to the setback requirements of the Apartment District to allow for a utility shed to encroach into the setback along Waiʻale Road.	Maui County Planning Department recommended this exemption in their letter dated May 31, 2018	Enables the project to be developed in accordance with the A-2, Apartment District zoning provisions, except for the utility shed encroachment along Waiʻale Road.
12. Requirements of all provisions contained in the Agricultural zoning ordinance.	Title 19, Maui County Code Section 19.30A – Agricultural District	**MCC 19.30A – Agricultural District.** An exemption from MCC 19.30A is sought to exempt the project from all provisions of this chapter.	Maui County Planning Department did not comment on this request, as this exemption was included as a corollary to the Department's recommendation to include the A-2, Apartment District zoning standards.	The A-2, Apartment District zoning standards will apply to the project per Exemption No. 11 as recommended by the Planning Department. However, the underlying zoning will still be "Agricultural". This exemption would clarify that the provisions of 19.30A are not applicable to the project.

APPENDIX I: SUMMARY OF EXEMPTIONS

SUMMARY OF EXEMPTIONS AND RECOMMENDED ACTIONS (cont'd.)				
Requested Exemptions				
Development Standard or Requirement	**Relevant Section/ Requirement**	**Requested Exemption/ Est. Value where Appropriate**	**Applicable Agency & Comments**	**Rationale for Request**
13. Requirement to install walls, fences, and landscaping of one (1) shade tree at minimum regular intervals for every five (5) spaces shall be provided within parking areas.	Chapter 19.36A.070.A Maui County Planting Plan, Chapter 4	**MCC 19.36A, Off-street Parking**. An exemption from Section 19.36A.070 Walls, Fences and Landscaping to allow for the flexibility in the placement of fences and shade trees as set out in the proposed conceptual site plan. Refer to **Figure 3**.	Maui County Dept. of Planning expressed no concerns with this exemption.	The project site is bordered on three sides with streets (Honoapi'ilani Hwy, Ku'ikahi Drive and Wa'iale Road) and is unique to the property by having two front yards. The fourth property boundary abuts an existing Urban District along the southern property boundary. The conceptual landscape plan will install landscape planting strips along all three roadways and along the southern boundary in accordance with the Conceptual Site Plan (Figure 3). Flexibility in the spacing of the landscape trees within the project will enhance visual screening of the project from the public street, as well as to provide shade. Strict adherence to MCC and the Maui County Planting Plan may not be possible.
14. Requirements for processing of a DBA request	Section 19.68.10 Purpose; Section 19.68.020 Applications, Section 19.68.030 Procedures; Section 19.510 Application and Procedures; County Charter Chapter 8, Department of Planning.	**MCC 19.68 State Land Use District Boundaries; MCC 19.510 Application and Procedures; County of Maui Charter, Chapter 8, Department of Planning.** Each of the foregoing provisions of the MCC and County Charter sets forth specific procedures for the processing of a State District Boundary Amendment (DBA) for parcels having a land area of 15-acres or less. The Applicant is seeking exemptions from the foregoing provisions of the MCC and County Charter to enable the DBA request to proceed directly to the Maui County Council. Accordingly, the DBA request will not be subject to the requirement for preparation of a DBA application as required by code, and will not require processing through the Maui Planning Commission. Instead, review and comment on the DBA request is being addressed through the Chapter 343, HRS process and the Section 201H process.	Maui Planning Department expressed no concerns on these proposed exemptions.	The exemptions will enable the expedited processing of the DBA request by allowing the request to proceed directly to the Maui County Council for review and approval by ordinance. The intent of the exemptions is to expedite the processing of the DBA by removing the requirements for application documentation, noticing, Maui Planning Commission hearing and related procedural matters which would otherwise delay the processing of the DBA. The Chapter 343, HRS and Section 201H processes provide an opportunity for public and agency review of the proposed action. The County Council will conduct its review and decision-making of the project through its standard process which will also provide for public and agency input.